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SUMMER READING LOSS: A PROGRAM EVALUATION ON THE IMPACT OF A
SUMMER SCHOOL PROGRAM ON REDUCING SUMMER READING LOSS IN
HIGH-POVERTY MIDDLE SCHOOL STUDENTS IN AN URBAN SCHOOL
DISTRICT

By
Rossi J. Volley

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

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Approval Page

This dissertation was submitted by Rossi J. Volley under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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Abstract

SUMMER READING LOSS: A PROGRAM EVALUATION ON THE IMPACT OF A SUMMER SCHOOL PROGRAM ON REDUCING SUMMER READING LOSS IN HIGH-POVERTY MIDDLE SCHOOL STUDENTS IN AN URBAN SCHOOL DISTRICT. Volley, Rossi J., 2020: Dissertation, Gardner-Webb University.

Summer vacation is an opportunity for students to relax from the academic demands of school. Unfortunately, during the summer break, student literacy skills decline, and growth is limited. This decline is especially significant for high-poverty students within urban public school districts. High-poverty students lose, on average, 3 months of academic learning over the summer months while other students gain or stay the same (Stein, 2016). Participating in an intensive reading program and engaging in academic experiences similar to those of their advantaged peers minimize summer reading loss (Schacter, 2003). The purpose of this program evaluation was to examine the impact a revitalized summer school program has on reading achievement for high-poverty students. This research used a mixed-methods approach. The quantitative portion of the study was conducted to determine the impact of summer school on summer reading loss for high-poverty students. It was measured by the Measures of Academic Progress (MAP). The Standardized Test for the Assessment of Reading (STAR) was used to measure the impact of the summer school instruction while teacher perception surveys and curriculum trainer interviews tracked the overall effectiveness of the summer school curriculum and implementation of the literacy strategies. The findings of the program evaluation revealed that some students made gains or avoided summer reading loss, while more students than not continued to make declines. While the findings did not

completely support the author's anticipated outcomes, this study adds to existing research of summer school programming and characteristics deemed necessary for effective summer learning experiences.

Keywords: achievement, high poverty, reading loss, summer school

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Chapter 1: Introduction

Summer learning loss, the phenomenon where young people lose academic skills over the summer, is one of the most significant causes of the achievement gap between lower and higher income youth and one of the strongest contributors to the high school dropout rate. For many young people, the summer “opportunity gap” contributes to gaps in achievement, employment and college and career success. Research shows that while gaps in student achievement remain relatively constant during the school year, the gap widens significantly during the summer. Every summer low-income youth lose two to three months in reading proficiency while their higher-income peers make slight gains. (“Summer Learning Loss,” 2017, paras. 1-2)

An Overview of the Research Problem

As a nation, we have implemented educational programs for the school year that allow rich kids and poor kids to learn at approximately the same rate during their school years. These reforms are to be lauded, but school-year educational equity is not the primary source of academic disparity-summer is the problem. It is the summer that determines children’s academic achievement, and it is the cumulative effect of summer learning loss. (Leefatt, 2015, p. 551)

Donald Hayes and Judith Grether studied fall-to-spring reading achievement for students receiving free and/or reduced priced lunch (FRPL) in 600 New York elementary schools. Their analyses of the achievement gains made during the academic year showed that “students in both high-poverty and low-poverty schools made substantially similar gains when school was in session” (Allington & McGill-Franzen, 2003b, p. 69). Most of

the reading achievement gap could be attributed to summer reading loss. According to Schacter (2003), the primary cause of the widening reading achievement gap is the significant amount of time students spend out of school during the summer and extended breaks. Socioeconomic status (SES) has minimal impact on the progress students make while in school. The discrepancies in achievement are a direct result of summer learning loss versus the deficiencies during the school year.

Allington and McGill-Franzen (2003b) emphasized the concerns for reform efforts that primarily target improving curriculum and instruction in the low-income schools. This reform failed to place value on the critical factors contributing to the widening of the reading achievement gap, such as summer break and lack of resources among high-poverty families. During the summer months, lower income students are disconnected from engaging and enriched learning environments that would contribute to their ongoing academic growth, while higher income students are more likely to be linked to learning opportunities that will ultimately set them up for future success. Each summer, the gap widens, and higher income students are accessing enriching resources that lower income families are unable to access, resulting in a 1 to 2 year achievement gap in reading between lower income and their higher income peers. This growing gap has negative implications for the advancement of high-poverty students with academic and career achievement (Leefatt, 2015).

Summer learning loss greatly impacts the ability to close the overall achievement gap among advantaged and disadvantaged students. Having the appropriate accountability measure in place is imperative when examining the impact schools and teachers have on learning (Alexander, Entwisle, & Olson, 2007b). In order to close the

achievement gap, policy makers must focus on a year-round approach to learning (Leefatt, 2015). At the initial start of school, there is not a significant gap in academic performance during the summer months. However, over consecutive summers, a distinct learning gap develops that results in academic loss in high-poverty students and academic gains in high-income students (Gao, Gilbert, & Woods, 2016). The skills gap that emerges during the summer vacation results in a cumulative loss of a third of a school year of learning. Some states recognize the impact of summer learning loss among high-poverty students. However, they have not figured out how to effectively address this phenomenon (Leefatt 2015).

Statement of the research problem. Gao et al. (2016) proposed, “the effects of the differential summer learning rates between low-income and higher income students are cumulative and resultantly contribute substantially to the achievement gap between the advantaged and disadvantaged population” (p.115). Despite steady efforts to close the achievement gap over the past decades, significant discrepancies remain. On average, summer vacations create an annual achievement gap of approximately three months between rich and poor students, favoring the students from the more economically advantaged families. Over time, the accumulation of summer learning loss occurring consecutively during summer month’s results in high-poverty students being 2 to 3 years behind their peers when they transition to middle school (Allington & McGill-Franzen, 2003b).

Higher income students have an advantage of continued learning through vacation experiences, visits to museums, and summer programming. When there is a gap in the academic schedule, it is difficult for high-poverty families to provide continued learning

for their children, therefore leaving high-poverty students at a disadvantage. This lack of continued education greatly impacts reading and math skills. Although research suggests that all students have a summer gap in math, generally, high-poverty students also have a gap in literacy while their higher income counterparts have maintained literacy skills and sometimes experience growth over the summer months. Mraz and Rasinski (2007) label the gap in literacy during the summer as summer reading loss. Summer reading loss is the decline in reading progress that occurs during time away from school when not engaged in literacy summer programming. Summer reading loss directly correlates with the low reading achievement within high-poverty schools (McGill-Franzen & Allington, 2006). Students who experience reading loss year after year ultimately experience a 3-year achievement gap (National Summer Learning Association, 2016).

According to the Baltimore Beginning School Study, the summer learning gap among high-poverty students increases over the elementary years and may limit their future educational opportunities (Alexander et al., 2007b). Research suggests that by ninth grade, summer learning loss is responsible for up to two thirds of the accumulated achievement between low and high SES students (Alexander, Entwisle, & Olson, 2007a). Cumulative learning loss among high-poverty students consistently increases throughout elementary school years and continues to expand through high school. This trajectory leads to increased high school dropout rates and lower college admittance rates among our high-poverty students (Alexander et al., 2007a).

In 1993, the National Education Commission on Time and Learning urged school districts to develop school calendars that acknowledged differences in student learning and major changes taking place in American Society. The report

reflected a growing concern about school calendar issues, especially for students at risk for academic failure. (Cooper, 2003, p. 2)

When students have a long, extended summer break, it disrupts the rhythm of instruction which requires teachers to spend a great amount of time during the beginning of the school year providing intensive review of skills (Cooper, 2003).

In a previous survey of the largest 100 school districts across the nation to determine which among them had implemented a form of summer programming. Based on the survey, all 100 school districts had established summer learning opportunities; however, most students do not attend school during the summer months. Therefore, despite the increased implementation of summer programming, there is still a significant layoff during the summer months (Borman, 2001).

Leefatt (2015) suggested that lack of participation in summer enrichment programs for high-poverty students could directly impact the achievement gap. High-poverty students are less likely to participate in summer programs due to monetary costs. In addition, high-poverty students have a great responsibility of caring for younger siblings during the summer while parents work to support the family. Having these responsibilities does not lend itself to participation in an effective summer program that provides the length of time and consideration for academics needed to maintain literacy skills.

Minimal access to books is also a possible cause for the summer achievement gap. Students living in poorer neighborhoods have less access to books and are read to less than students living in higher income neighborhoods. Mraz and Rasinski (2007) suggested that access to reading materials is critical to enhancing reading development in

children. Reading has a profound impact on academics and is the most effective way to improve literacy skills in fluency, comprehension, and vocabulary. There are limited resources within high-poverty communities. As a result, not only do students have a limited selection of books to read within the home, the neighborhood also has limited books available for students to access. Children become better readers, the more they read and the greater the amount of leisure reading they experience (Leefatt, 2015).

Mraz and Rasinski (2007) also proposed that family structure and neighborhood patterns contribute to widening the summer achievement gap. Children whose mothers are at least 20 years old at the birth of their first child and children who live with both parents also tend to have better educational outcomes over the summer than children of teenage moms. In addition, parents who recognize the benefits of reading to their children and have a higher literacy level are more likely to read at home to their children over the summer and introduce reading strategies to their children. Middle-income parents are usually more actively involved in their children's education than their lower income counterparts (Fifer & Kruger, 2006). High-poverty families have less time to dedicate towards educational activities during the summer. High-poverty families are charged with maintaining multiple jobs in order to compensate for their lower hourly rate salaries (Leefatt, 2015).

Public opinion and lack of understanding also contribute to summer reading loss. There must be an overall commitment to summer learning by those in the majority in order for there to be monetary backing. "These factors are not solely responsible for the existence of the achievement gap; rather, they amplify the deleterious effect of summer gap and its negative impact on disadvantaged students" (Leefatt, 2015, p. 562).

No Child Left Behind was an initiative that focused on closing the achievement gap by offering resources and funding to support students during the traditional school year. School districts were given Title I funding to allocate to schools with the highest number of high-poverty students. Individual high-poverty schools could utilize the funding to provide school-wide programs, and schools that were not identified as whole school Title I were to use the allotted funds to target services to lower income students (Hickok, Neuman, & Paige, 2002). “However, any policy that attempts to remedy the achievement gap by targeting the transitional school year alone is ultimately inadequate” (Leefatt, 2015, p. 563).

Many students will experience summer reading loss as a result of summer break, which suggests that the knowledge gained throughout the school year will be lost due to disengagement of learning activities. The severity of summer reading loss depends on the education level and economic status of the children’s family (Duncan, 2012).

On the 2009 National Assessment of Educational Progress, 49% of high-poverty fourth-grade students scored “below basic” in reading, whereas only 20% of high-income students scored “below basic” in reading. High-poverty is characterized by students eligible for FRPL (National Center for Education Statistics, 2010).

While wealth appears to be the primary determinant of academic achievement, research suggests that there are other factors that impact overall success. These areas are acknowledged but not explored to determine the magnitude of the impact in relation to summer reading loss. The factors include parental influence, teacher influence, peer influence, and residential influence. It is acknowledged that students perform better when parents are actively involved. High-poverty families have less involvement due to

work obligations and possibly negative experiences in their school career. The best teachers generally prefer to teach within more middle class schools. Teachers within middle class schools are generally licensed in the areas they are teaching; they have a better formal education and have greater experience than teachers within a high-poverty school population. Student achievement may also be related to peer relationships. Students with strong positive peer relationships are less likely to participate in negative school behaviors such as skipping class and other disciplinary actions. It is noted that high-poverty schools present a very difficult learning environment. Since students usually attend schools within their attendance zone and neighborhoods, students are more likely to attend a school with minimal supplies and more distractions (Leefatt, 2015).

As noted in Gershenson (2013), Borman, Benson, and Overman (2005) debated four areas that could contribute to the reading level differential. First, high-income parents have the time and resources to invest in their children to expose them to various experiences during summer vacation. Second, people associate effective parenting strategies with SES which suggests that the higher the SES, the more effective the parenting. Third, psychological models suggest that high-SES parents have a perception that schools desire parent involvement. Therefore, they are more willing to provide that support and actively engage in the functions and events at the school. Finally, there may be a difference in summer learning rates if high-SES students participate in learning activities more often and gain more from their participation (Gershenson, 2013).

Children who are disadvantaged have parents with lower expectations for their achievement and future job prospects. These lower parental expectations lead to less frequent school visits, less monitoring of their child's academic work, and

fewer books checked out from the school library compared to children from middle- and high-income backgrounds. (Schacter, 2003, p. 48)

Purpose

Summer break, a time set aside for vacations filled with excitement and fun, usually results in summer reading loss for high-poverty students. Summer reading programs (SRPs) are implemented to contest this loss (Petty, Smith, & Kern, 2017). School districts and communities have taken various approaches to address summer reading loss. Several school districts and states have implemented summer school as an intervention beginning as early as second grade. However, summer school has been deemed an ineffective reading intervention for high-poverty students. The effects have been minimal or nonexistent. Summer school initiatives are noted as ineffective due to poor attendance, summer school not being offered until the end of the third-grade year, programs seen as punitive, and the duration of the program being too short to accomplish meaningful gains. Although deemed ineffective and no reading gains noted, one positive outcome of summer school was minimal reading loss (Schacter, 2003).

Summer camps and enrichment programs have been embedded across the community in various capacities. Increasing summer reading activity consistently correlates to reading gains over the summer. Reading is the primary activity that correlates to summer learning (Allington et al., 2010).

According to Roman and Fiore (2010), public libraries have established and maintained effective SRPs geared to encouraging reading and developing a passion for reading among students to help prevent summer reading loss. Book clubs offered over the summer are also an initiative utilized to combat summer reading loss. Creating a

learning environment that promotes social interaction and involves activities to stimulate exchanges with other children, teachers and parents help make summer reading more engaging (Petty et al., 2017). According to Jesson, McNaughton, and Kolose (2014), summer reading development is influenced by how often children are engaged in reading activities over the summer, the extent in which school contributes to summer learning by providing guidance in learning opportunities to students and families, and how the home and community implement and support engaging reading activities.

Summer reading loss has been acknowledged as a phenomenon for many years. SRPs have been shown to positively combat summer reading loss and influence reading during the summer (Petty et al., 2017). SRPs in public libraries encourage students to continue their learning through the summer months. Within these programs, students are given access to books to practice communication skills and develop a love and passion for reading (Small, Arnone, & Bennett, 2017).

Some initiatives suggest that summer reading gains are impacted greatest when students are able to choose the books they read. When students have access to books and engage in reading complex texts throughout the summer, this has a more positive impact on summer reading (Compton-Lily, Caloia, Quast, & McCann, 2016). The purpose of this study was to examine the impact summer learning programs have on reducing summer reading loss among high-poverty students.

Significance of the Study

Students from high-poverty families are at a disadvantage each summer they lack the opportunity to participate in literacy-rich summer experiences. Underprivileged families have less opportunity to engage in enriching learning experiences that could

positively impact their academic growth. When high-poverty students are unengaged in literacy-enriched environments, it puts them at a disadvantage to their higher income peers.

As a result, the summer achievement gap continuously widens and becomes difficult to close. Understanding the research dedicated to summer reading loss is imperative when identifying ways to close the achievement gap. It is important to study SRPs to determine if participating in these initiatives positively impacts high-poverty students and results in academic gains great enough to help eliminate summer reading loss. Examining SRPs allows an opportunity to delve into the characteristics of effective summer learning programs and the reading strategies implemented within these initiatives.

The information gathered during this study will benefit the Departments of Public Instruction, local education agencies, parents, summer program organizations, community partners, and other community stakeholders. It will highlight how summer reading initiatives positively influence how a child reads and the impact quality summer programs have on academic success. The study will highlight the instructional practices that make summer school programs effective and beneficial for all students. This information can be used to ignite summer learning opportunities throughout the school districts, offering multiple ways to conquer the summer learning slide and close the achievement gap.

Context

This study targeted high-poverty students who participated in a revitalized summer school learning program. The demographics of the participants varied across the

summer learning sites but reflected the demographic makeup of the school district. The research examined two middle school summer school programs, serving as feeder sites for all seven middle schools throughout the district. The summer school programs were studied to determine the impact of summer school on reducing reading loss for high-poverty students.

The 2015-2016 Average Daily Membership for the urban school district serves nearly 24,000 students. Of these students, approximately 75% are eligible for FRPL. As of the 2014-2015 school year, all students receive a breakfast and lunch meal daily, free of charge under the Community Eligibility Provision. Seventy-five percent of the students are African-American, 13% Hispanic, 9% White, and 1% Asian. The district is comprised of 26 elementary schools, seven middle schools, five comprehensive high schools, three specialty schools, and one charter school. For the purposes of this study, the focus was on high-poverty students in grades 6 and 7 who participate in the summer school program.

Definition of Terms

Summer learning loss/summer decline/summer drift. The decline in academic development that occurs during time away from school when not participating in an academic summer program.

Summer reading loss. The decline in children's reading development that can occur during summer vacation times when children are away from the classroom not participating in formal literacy programs.

Achievement gap. Refers to the observed, persistent disparity in measures of educational performance among subgroups of U.S. students, especially groups defined by

SES, race/ethnicity, and gender.

Socioeconomic status (SES). An economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others based on income, education, and occupation.

High poverty. For the purpose of this study, high-poverty students are students who qualify for FRPL.

Curriculum-based measures (CBM). A method teachers use to find out how students are progressing in basic academic areas such as math, reading, writing, and spelling.

Standards of learning (SOL). A public school standardized testing program in the Commonwealth of Virginia. It sets forth learning and achievement expectations for core subjects for grades K-12 in Virginia's public schools.

Measures of Academic Progress (MAP). Computer adaptive achievement tests in mathematics and reading. The computer adjusts the difficulty of the questions so each student takes a unique test.

Chronic absenteeism. Missing 10% or more of the academic year for any reason, including excused and unexcused **absences**, suspensions, and time missed due to changing schools.

Research Questions

To study the impact of summer learning programs on reducing summer reading loss in participants, the following research questions were asked. The first overarching question that directed this research was,

1. What is the impact of the summer learning program on the reading achievement level of high poverty students?

The second overarching question that directed this research was,

2. To what extent do the literacy strategies used during the summer school program impact reading achievement?

To answer the overarching question, the following sub-questions were addressed:

- a. What literacy strategies were used throughout the summer school program?
- b. Which literacy strategies had the greatest impact on student achievement?

Summary

Each year, children from high-poverty families experience reading regression while on summer break. As a result, when students return back to school in the fall, it takes weeks or months to regain those lost skills. While high-poverty students are spending time regaining lost skills, their peers who did not experience learning loss continue to move forward in the curriculum (Petty et al., 2017).

The “faucet theory” provides an explanation of the summer learning loss phenomenon. This perspective suggests that when the faucet is turned on in schools, that is an indicator that school is in session. During this time, students from all socioeconomic backgrounds have similar literacy gains. However, when the faucet is turned off, during summer break and school is not in session, students from higher income levels continue to gain reading proficiency, while high-poverty students do not make similar gains (Alexander, Entwisle, & Olson, 2001).

Kids who read over the summer are less likely to experience reading loss. In addition, students who engage in learning experiences throughout the summer have a

greater chance on maintaining their reading skills. Higher income students have a greater advantage over high-poverty students. They are exposed to literacy-rich learning experiences over the summer while on vacation or interacting within their community, while lower income students are disconnected from learning experiences and engaging in more nonacademic activities.

This study honed in on a summer school program that promotes reading growth and academic achievement. Summer reading initiatives were examined to identify the impact they had on high-poverty students.

Chapter 2: Literature Review

The purpose of Chapter 2 is to describe the research that exists on summer reading initiatives and the impact on summer reading loss and achievement for high-poverty students. The literature selected addressed the purpose of summer reading initiatives such as preventing summer reading loss and narrowing the achievement gap; the characteristics of effective summer reading initiatives and the different types of SRPs such as summer camps, summer school, library programs, access to books were also reviewed. Finally, the chapter provides insight into ways summer reading initiatives impact student achievement for high-poverty students.

Summer Reading Loss

Summer reading loss has been of great concern throughout public education for decades. It has been identified as the culprit for lowering reading achievement levels (Whittingham & Rickman, 2015). Allington and McGill-Franzen (2003a) suggested that summer reading loss occurs when reading proficiency of high-poverty students declines, while middle-high income students experience a modest increase. It occurs when achievement plateaus or declines over the summer (Jesson et al., 2014). Summer reading loss is understood to “account for as much as 80% of the difference in achievement for students between low and high socio-economic families over their elementary schooling” (Vale et al., 2012, p. 1).

Duncan (2012) viewed summer learning loss as the progression of losing information such as the skills and knowledge students gain during the school year. The average summer break causes an annual achievement gap of 3 months between advantaged and disadvantaged students (Allington & McGill-Franzen, 2003a).

The deterioration of reading skills among high-poverty students is a result of minimal reading occurring within the home and lack of resources available to the families when school is out for summer break (Alexander et al., 2007b). “This differential access to educationally meaningful experiences and resources can lead to the observed differences in learning during the summer between advantaged and disadvantaged children” (Stein, 2016, p. 32). Children without an opportunity to engage in learning experiences for multiple years have an achievement gap that significantly increases throughout the elementary and middle school years. Summer reading loss can contribute to approximately two thirds of the gap in reading achievement by ninth grade (Caputo & Estrovitz, 2017).

Evans (2005) suggested the discrepancy between reading development and achievement among students from advantaged and disadvantaged homes is related to the family’s home and community environment, available resources, and the limited or rich experiences. The achievement gap occurs regardless of the academic gains each group makes during the academic school year. The achievement gap between low and high socioeconomic students is the “most stubborn perplexing issue confronting American schools today” (Evans, 2005, p. 582). In order for high-poverty students to experience gains instead of reading loss over the summer, they must participate in intensive programming and engage in academic experiences similar to those of their advantaged peers (Edmonds, O’Donoghue, Spano & Algozzine, 2009; Schacter & Jo, 2005).

The summer presents a significant change for high-poverty students, resulting in a lack of access to educational resources and meaningful learning experiences, which leads to opportunity gaps between advantaged and disadvantaged students. Without access to

resources, high-poverty students must depend on their families and communities to provide ongoing support throughout the summer (Alexander et al., 2001).

During the school year, all children have unlimited access to books and other educational resources. However, over the summer break, those resources are cut off and unavailable to high-poverty students (McGill-Franzen, Ward, & Cahill, 2016). No matter how great the teaching during the school year, it cannot overcome a summer without books. The lack of resources during the summer negates the academic gains students make during the school year (Cox, 2013). Although the quality of teaching is a known factor in student achievement, the achievement gap between low- and high-income students is more related to the experiences high-income students have the opportunity to engage in and low-income students rarely experience (Rycik, 2009).

Income and achievement gaps occur in tandem: Poor families not only have less money to spend in general than more advantaged families, but they invest proportionately less in the cognitive development of their children, particularly literacy activities, that would support out-of-school learning. (McGill-Franzen et al., 2016, p. 586)

Once disadvantaged, high-poverty students start school, they continue to need resources and other connections to supplement their educational access. On the other hand, more advantaged families engage in literacy activities that include trips to the library and read alouds (McGill-Franzen et al., 2016).

Children from higher income families usually come from parents who did well in school and greatly value education; children from lower income families more often have parents who had negative educational experiences and lower literacy levels. Those

experiences trickle down to their children. Both high-income and low-income parents want great educational opportunities for their children. However, low-income parents lack the resources to provide these opportunities for their children (Alexander et al., 2007b). Once students begin school, the correlation between SES and academic outcomes becomes evident (Burkam, Ready, Lee, & Logerfo, 2004).

Narrowing the Achievement Gap

Summer reading loss is a critical factor to the achievement gap between students from advantaged and disadvantaged homes (Becnel, Moeller, & Matzen, 2017).

Alexander et al. (2007a) suggested that developing positive relationships between school and home extends opportunities to address the achievement gap between advantaged and disadvantaged communities. Fostering these relations include

- holding and enacting high expectation of teachers and students,
- enacting positive relations between teachers and students and between students in classroom, and
- engaging with parents and the community to bridge the gap between students' school learning and their out-of-school learning and cultural knowledge.

Summer Reading Initiatives

Edmonds et al. (2009) explained that evidenced-based reading programs have been implemented throughout various communities and school districts to address the reading skill deficits that occur over the summer within high-poverty communities.

Bringing these benefits to children during the summer before they begin kindergarten may successfully extend high-quality to pre-school programs through the final summer before kindergarten, thus assisting the children in these

programs to be academically and socially ready for the demands of formal schooling. (Edmonds et al., 2009, p. 214)

The primary purpose for summer reading opportunities is to encourage students to read more and to engage in fun learning experiences through reading (Krashen & Shin, 2004). Since literacy skills decrease over the summer primarily for high-poverty students, it is critical to provide engaging learning experiences that address reading deficits and eliminate summer reading loss (Edmonds et al., 2009).

SRPs are an intervention many school systems are using to halt summer reading loss. Policy makers have adopted two summer interventions, classroom-based and home-based interventions. Classroom-based interventions are instructional strategies implemented by a classroom teacher or other specialist to address skill deficits. Home-based interventions are a low-cost intervention provided within the home to help eliminate summer reading loss among high-poverty students (Kim & Quinn, 2013; McCombs et al., 2011).

Public Library SRPs

Public library SRPs are one solution used to combat summer learning loss. Ninety-five percent of public libraries offer SRPs. Balsen and Moore (2010) suggested that children benefit from SRPs that include combining elements of youth development and academic achievement to effectively address summer reading loss. Public library SRPs encompass these elements by providing opportunities for students to interact with peers and develop relationships. SRPs promote peer interaction and work with participants to build interpersonal skills. They address literacy needs by engaging participants in reading activities to build and increase reading proficiency.

SRPs are developed to endorse literacy and introduce leisure reading using various activities and games. It has been proven that “more than any other public institution, including the schools, the public library contributed to the intellectual growth of children during the summer” (Roman & Fiore, 2010, p. 27). However, a recent study by Justice, Piasta, Capps, and Levitt (2013), in cooperation with the Columbus Metropolitan Library, found that the families taking advantage of SRPs are those already excelling in reading and have easy access to their community public library (Becnel et al., 2017).

The Institute of Museum and Library Sciences, Dominican University’s Graduate School of Library and Information Science received a grant over a 3-year period, between 2006 and 2009, to revisit whether public library SRPs impact student achievement and if there is a relationship between the intensity of the program and student outcomes and to focus on partnerships between public libraries and schools for enhancing student achievement. Dominican University, the lead agency, contracted with The Center of Summer Learning at John Hopkins University to conduct the research.

Participants selected for the study included students just completing their third-grade year and entering fourth grade in the fall, parents, teachers, and public librarians providing summer reading instruction. They were required to meet the following criteria: 50% or more of the school population had to qualify for FRPL; at least 85% of the school population would be required to take a reading proficiency test in English; public libraries would have at least a 6-week reading program over the summer; schools and public libraries had to apply in pairs and have a history of working together collaboratively; the school and public library would sign a partnership agreement; and the

school and public library staff would participate in trainings. Eleven sites from across the U.S. were selected to participate. Researchers used a variety of data collection tools such as staff interviews, Scholastic Reading Inventory pre and posttests and student/parent/teacher surveys to evaluate the effectiveness of the program (Roman & Fiore, 2010).

The 3-year study found that student participation in SRPs resulted in higher reading achievement scores in the fall and spring of the following year, and participants did not experience summer reading loss. Parents of the summer program felt their child was more prepared for school at the completion of the summer program. Teacher survey results indicated program participants started the school year ready to learn, were more motivated and engaged in school, made improvements in their reading, and became more confident in their reading skills. Other factors that could have impacted the overall results of the program included the dynamics of the program participants. Based on the demographics of the program, it was found that more Caucasians and more girls participated in the program, fewer students were on FRPL, and more students entered with higher spring reading scores. Families who chose to participate in the program consistently accessed the public library throughout the year, there were more books in the home, and they engaged in more literacy activities than those students who did not participate in the public library summer program (Roman & Fiore, 2010).

According to Dominican University, students involved in a public library SRP showed a greater level of achievement in literacy than those students who did not participate in a program. In addition, within the study, students who did not attend an SRP through the public library also showed some improvement, just at a lower level than SRP participants. Teachers and school library staff recognized that students who had

participated in public library SRPs returned to school better prepared to read and seemed to enjoy reading for pleasure more than their peers who had not participated in an SRP (Groot, 2012).

Public library SRPs provide an array of experiences for all demographics. They incorporate group activities that promote collaboration and interaction with others (Fiore, 2005), assist in developing lifelong reading habits, and attract disinclined readers (Witteven, 2018). SRPs have the flexibility to focus on the social aspect of reading, while schools are charged with the formal academic side. Leisure reading among children results in a higher likelihood of retaining their literacy skills (Groot, 2012).

Texas Woman's University School of Library and Information Studies collaborated with North Branch of Denton Public Library to explore ways to eliminate summer reading loss. The initiative was "Expanding Our Reach through Summer Reading." The initiative was designed to increase communication and collaboration among school librarians and public librarians and insert school librarians in SRPs offered through public libraries. The associates linked to four elementary schools located in the North Branch of Denton Public Library service area and researched ways to effectively collaborate and form school-public library partnerships. Based on the feedback and research, the pair outlined an implementation plan to motivate students to attend SRPs. The timeline included:

- working to publish names of SRP participants in the newspaper;
- public librarians visiting the schools to promote SRPs during PTA meetings or other spring events;
- public librarian visiting other places students would spend their time during

the summer, such as summer school, day care, camps;

- school librarians would participate in SRPs by leading story time or engaging in other presentations;
- school and public librarians would plan an author event to recognize the achievements of the participants of SRPs prior to the start of school; and
- SRPs would be evaluated at the end of the program to help plan and prepare for the following summer.

The partnership between the public-school librarians began by establishing mutual goals and outcomes for students participating in SRPs as well as brainstorming ways to encourage and motivate students to continue their reading over the summer. The librarians raised awareness for the program by sending information home to parents via an infographic. One of the schools within the partnership began taking field trips to the public library since many students had never visited one before. During spring events, the public library would set up an information booth to provide parents with additional information about SRPs. The outcomes of the program showed an increased participation rate for students within SRPs than in previous summers. The collaboration between the school-public libraries proved to be an effective strategy in increasing the participation. The program did not track any improvements in the overall reading performance of the participants as a result of the program (Tucker, Moreillon, Richmond, & Lynn, 2015).

Summer School

Summer school is another initiative that, when done correctly, could effectively lessen the achievement gap by reducing summer reading loss. Summer school should be

an “integral part of a year-round program of extra time and extra help” (Christie, 2003, p. 1). It is necessary to provide research-based interventions and instruction during the summer months to supplement the academic school year. Conversely, to high-poverty students, summer school has a stigma that categorizes all attendees as failures by being mandatory for those not meeting promotion standards (Alexander et al., 2001).

As noted in Lauer et al. (2006), Cooper, Charlton, Valentine and Muhlenbruck (2000) reported on a synthesis of summer school research using both meta-analysis and narrative review. The results indicated positive academic effects resulting from summer school for both middle-income and high-poverty students. “Students in the early elementary grades and secondary grades benefited more from summer school than did students in late elementary grades” (Lauer et al., 2006, p. 278). “In addition, results favored programs that run for smaller numbers of students and those that provided more individualized and small group instruction to students” (Lauer et al., 2006, p. 277-278).

Instructors of summer school programs should have specialized training with experience working with low-performing students. Most often, the only requirement teachers must have to provide extended learning instruction to struggling students is teaching licensure. Students requiring additional support to meet grade-level proficiency need teachers with tracked success, specialized reading training, or strong implementation of effective online programs. Tennessee emphasizes assigning higher level teachers to summer school programs to support struggling students (Christie, 2003).

An engaging curriculum is a critical component to summer school programs. It is important that students participating in summer school are not repeating the same instruction offered during the academic school year. It should not be a form of

punishment for low-performing students and should differentiate between students refusing to perform due to noncompliant behaviors and those who lack the skills to perform.

Programs should consistently monitor teacher performance and outcomes regarding student achievement. Some states and school districts require evaluation reports of student performance and individual teacher performance according to assessment results. The Colorado State Department of Education is required to produce a report that compares student performance for reading and writing for students who participated in SRPs and eligible students who did not participate in the program (Christie, 2003).

Kim and White (2011) suggested that summer school is not the solution to summer reading loss. Every school district across the U.S. consistently faces budget cuts yearly. The growing cost of facilities and personnel make it difficult to sustain summer school programs that will adequately address summer reading loss. Therefore, sustaining effective summer school programs is difficult.

Almus and Dogan (2016) evaluated a summer school program that consisted of participants from two high-poverty urban public charter schools in Kansas City, Missouri. The two schools had a combined FRPL percentage of 94%. The study was conducted to “determine whether the program had any impact on student achievement and differences in students’ reading achievement scores and students’ responses to learning and academic progress based on grade levels” (Almus & Dogan, 2016, p. 2). The summer school program was a 5-week program that provided intense instruction in reading, mathematics, and science. The program consisted of 534 students ranging from

K-8. Eighty of the 534 students were newly enrolled kindergarten students, 454 were existing students, and 24 of the existing 454 students were required to attend due to failing core classes during the academic school year. Students who performed below grade level throughout the school year on the reading and/or math Standardized Test for the Achievement of Reading (STAR) assessments were invited to attend. English Language Learner (ELL) students were also invited to attend.

The main structure of the summer school program included instruction, schedule, incentives, and extracurricular activities. For instruction, teachers were encouraged to use instructional practices and strategies that were not used during the school year, such as project-based lessons, student-led instruction, hands-on activities, small group, cooperative learning, and educational games. The summer school curriculum was intended to focus on the standards students did not master during the school year. The summer schedule included courses in reading, mathematics, science, and fine arts. Drop Everything and Read (D.E.A.R.) was also included in the program schedule. Incentives were determined according to feedback provided by school administrators and teachers and were developed to increase engagement and participation rates for students. Some examples of the incentives were free bus transportation, free breakfast and lunch, free school shirts, and sports. Physical education was the extracurricular activity offered to all students.

The data measured for this study included performance on the STAR reading assessment (pre and post); survey results from teachers, parents, and students; and observations conducted by program administrators. The pretest scores used for summer school and evaluative purposes were the end of school year STAR results. These scores

were used rather than administering an additional preassessment. ANOVA, an additional procedure, was used to determine if there were any reading improvements. Student surveys were only administered for grades 3-8 due to maturity levels of the younger students. Surveys were completed by 221 students, 35 teachers, and 14 parents (Almus & Dogan, 2016).

The STAR reading scale scores were used to determine the impact on student achievement in reading. The scale scores range from 0-1,400. Kindergarten students were not tested and therefore are not included in the results. Three hundred eighty-six student scores were included in the report. Scores did not include students who left the program, were absent during the postassessment, did not have pretest scores, and those who had a decline in attendance. Pretest and Posttest comparison data showed a significant increase in the posttest scores. These data indicate the summer school program had an impact on student reading achievement. Survey results suggest that summer school had a positive effect on student learning and achievement. Observations of the program revealed that students were on task and taking summer school seriously. In order to determine the student's reading progress according to their grade level, the difference between each student's pre and posttest scale scores were calculated and then a one-way ANOVA test was conducted. The results of the ANOVA test revealed that there was no significant difference on student progress across the grouped categories of first and second graders; third, fourth, and fifth graders; and sixth through eighth graders.

An analysis of the surveys completed by all participants rendered the response that the most favored incentive offered in the program was monetary credits towards extracurricular activities for the upcoming school year. The most favorite activity was

PE soccer, the most favorite in-class activity was educational games, and the least favorite activity was DEAR time. Participants indicated they would like to engage in more field trips and extracurricular activities during summer school. Some teachers revealed that they did not use different strategies and instructional practices than what they used during the school year. However, some teachers indicated they used project-based learning, small group, educational games, hands-on, and collaborative groups during summer school; which were their common practices during the regular academic school year (Almus & Dogan, 2016).

Chicago's summer school program, Summer Bridge, was established to provide summer learning opportunities for students who did not pass the required Iowa Test of Basic Skills. The Summer Bridge program developed a schedule appropriate for various grade levels served. A standard curriculum was utilized during the summer that was aligned with the Iowa Basic Skills Test. Based on assessment results, the borderline students passed the Iowa Basic Skills Test at the end of the summer program. Even the students who did not pass the test made academic gains.

Attendance during summer school is usually a major problem. However, with Summer Bridge, student attendance dramatically increased in comparison to the school year. The program evaluation suggests that the success of the Summer Bridge Program was reflective of the individual attention they received from teachers as a result of smaller class sizes. One important lesson of Summer Bridge is that 1 year of summer school will not close the achievement gap. Students who participated in Summer Bridge and passed the Iowa Basic Skills Test continued to be at risk and were required to attend summer school in future grades (Denton, 2002).

Literature reveals that remedial summer school is beneficial to all students; however, there is a more significant impact on students in earlier grades. There was a similar trend in this study. According to STAR results, the mean scores for the elementary group were significantly higher than the mean scores of the middle school group. In addition, survey results revealed that the elementary group believed that they learned and progressed more during the summer when compared to the middle school group. There was a dramatic increase in participation during the summer program when compared to previous years. Feedback suggests that this is due to the efforts made on behalf of school administration to increase parent communication and to establish the communication plan early.

The results of this study suggest that providing hands-on, incentive-driven, enrichment-focused summer school is a great motivator for students required to attend summer school and those voluntarily attending summer school (Almus & Dogan, 2016).

Camp-Based Reading Programs

Camp-based reading programs include enrichment opportunities to address reading deficits and decrease summer learning loss. The programs offer students emotional and physical stability, build student confidence and readiness skills, and offer activities that develop leadership skills. Camp programs create opportunities that prepare students to engage in learning experiences, which have a greater impact on school readiness.

American summer camps have thrived in the areas of recreational and educational enrichment. Over time, summer camps have evolved in four distinct areas: recreational stage, educational stage, social orientation and responsibility stage, and the new direction

stage. The American Camp Association, National Youth Development Outcomes study, the first large-scale study of U.S camps, conducted in 2005, provided a large scale perspective of the impact summer camps have on children. In this study, youth, staff, and parents were asked to share the benefits of the camp. Results suggest that youth participants experienced growth in self-esteem, peer relationships, independence, exploration, leadership, environmental awareness, friendships, values, and spirituality. The camp environment also provides opportunities that lend to supportive relationships, safety, youth involvement, and skill building. The environment provides the proper setting for learning (Garst & Ozier, 2015).

The American Camp Association did an environmental scan of camp-based reading programs and found that approximately 220 camp-based reading programs were reaching approximately 360,000 students across 36 states. Several camp-based reading programs spend time focusing on reading attitudes as a part of their program goals and structure. Students gain learning readiness skills as a result of their participation in summer camps.

A study was conducted to evaluate the efficacy of U.S. camp-based reading program “Explore 30” and the effectiveness of the reading interventions used in the program. In 2011, 218 day and residential camps participated in the Explore 30 camp reading program. Explore 30 required camps to embed 30 minutes of reading time each day of camp. Individual camps determined the formal or informal activities for the 30 minutes of daily reading. Camps participated in various reading activities such as daily visits to the public library for read aloud and instruction from librarians. Several camps implemented D.E.A.R. Others implemented nighttime read alouds with the camp

counselors, education clubs, and use of reading logs for independent reading. Camp directors were asked to complete the Explore 30 survey at the end of the summer camp. Of the 218 participating camps, 49 camp directors completed the survey. According to the 49 surveys, camp directors indicated they served approximately 13,000 campers with Explore 30. SES varied among the participants, with 12% reported to be at the poverty level, 24% low-income, 59% middle income, and the remaining considered high income. Results suggest Explore 30 was an appropriate model for camp-based SRPs. Pre/postassessments completed by the campers reflected a positive self-report of a change in their feelings towards reading (Garst & Ozier, 2015).

Camp Read-a-Rama, a camp-based reading program, is a summer day camp in South Carolina that “creates innovative programming using children’s literature as a springboard for all camp activities” (Copeland & Martin, 2016, p. 112). It provides fully engaged, week-long literacy themed immersion experiences that seek to turn “summer slide” into “summer stride.” In addition to books and reading, the camp incorporates outdoor activities, educational fun, and traditional camp crafts. The campers have an opportunity to interact positively with books daily through D.E.A.R. and connecting literature with songs, sign language, drama, movement, science, writing, games, arts and crafts, and more. The structure of Camp Read-a-Rama emphasizes the goal of literacy immersion while it also builds leadership skills. The camp aims to improve the camper’s attitude towards reading and literature and emphasizes the goal of literacy immersion while also building leadership skills.

Parents and students completed a presurvey prior to the start of camp and a postsurvey immediately following the completion of the camp. Six months following the

camp, parents and students participated in follow-up interviews to share their overall experience with Camp Read-a-Rama and the impact it had on the camper's attitude towards reading.

According to postsurvey results, 67.1% of parents felt that their children have a positive attitude towards reading. This was an increase from the 64.3% presurvey results. Postsurvey results also indicated that parents felt their children's knowledge of books increased due to their participation in the camp. The camp allowed reluctant readers to gain a more positive attitude towards reading and those who already had a positive attitude towards reading became even more enthusiastic about reading.

Camp Read-a-Rama integrates various activities throughout the camp such as arts, swimming, and games into their book-centered program. Parent survey results indicate that the immersion and integration of these activities helped contribute to the improvement of their child's attitude towards reading. The results of the parent surveys also revealed that Camp Read-a-Rama impacted their child's overall reading and listening skills, reading fluency, social skill development, increased quantities of reading, increased variety in subjects and genres chosen when reading, and an improved ability to focus when reading.

The following elements are essential to the overall success of the program:

- superior staff
- low staff-to-camper ratio
- diverse literature
- diversity at all levels
- interdisciplinary and creativity

- teaching children to “live books”
- parental engagement
- community engagement

Camp Read-a-Rama staff engage in extensive professional development prior to the start of the program and throughout camp season. The staff is diverse in cultural, gender, ethnicity, and SES. The program seeks to hire students and college graduates who are experienced in children literature. The staff-to-camper ratio is 1:5 for the younger campers and 1:7 for the older campers. The low staff-to-camper ratio ensures safety throughout the camp and lends to establishing positive relationships. Each camp has an on-site library with high-interest books and seeks to provide books based on camper request. The camp fosters a positive and diverse inclusive environment. Campers interact with other campers from different backgrounds, SES, sexual orientation, and physical and cognitive abilities. The camp aims to provide activities campers are not usually exposed to at home or in the school setting. The camp aims to connect literature and books to everything they do throughout the day. Parent engagement is critical to the success of the camp. During the camp season, there is ongoing communication and weekly parent literacy nights. Camp Read-a-Rama seeks the involvement of the community by inviting public figures to come and share their favorite books with the campers. This helps campers see the importance of being lifelong readers (Copeland & Martin, 2016).

Another camp-based reading program out of Nassau, Bahamas was established to immerse the participants in literacy and to increase their desire to read. This reading camp took place over the course of three summers. Forty-five low-performing students

were chosen to participate in the program which was taught by graduate students completing a master's program in education and had at least 8 years of teaching experience. During the reading camp, the teachers used a multiple-strategy approach to increase reading comprehension skills and increase their appreciation for children's literature. For each book read during the reading camp, the following activities were implemented: picture walk, interactive read aloud, comprehension activities, paired reading, reading a non-fiction book, literacy circles, and writing.

Picture walks were conducted to introduce the book to the students. Teachers directed students to look at each page and each picture and make a prediction of the book solely based on the pictures. This would stimulate the student's curiosity to engage in reading the book. The interactive read aloud consisted of the teacher reading the book aloud to the students and stopping frequently to engage in questions and discussion about what has been read as well as making predictions. Comprehension activities were provided for each book. These questions were geared towards ensuring student understanding of the subject as well as their ability to analyze and apply the information that was read. Paired reading allowed the students to read the same book aloud with a partner. This would increase fluency and comprehension skills. Each book read was paired with a non-fiction book. The non-fiction book was also read aloud to the students and used to connect and increase student knowledge of the subject. Literacy circles were included to expand student comprehension skills. Students were assigned to a group of three to four peers, and each student had a role. Each role required a discussion perspective for the story. A reporter was designated to report what was discussed within the group. Finally, each student participated in a writing activity. Each student was

required to write for 15 minutes about areas of interest from the book. They were able to participate in the author's chair if they wanted to share their writing with the group (Armstrong, 2013).

This 3-week reading camp included Friday field trips to the beach, which most of the students had not experienced prior. Standardized reading assessments were administered after the 3-week camp. Results from the assessment indicated overall growth in comprehension during the first 2 years, with the last year showing a few students decreased in their overall comprehension skills (Armstrong, 2013).

In-Home Book Access

Kim and White (2011) recommended providing a low cost summer intervention option which gives high-poverty students books to read over the summer. They proposed that providing books to students removes the need to hire teachers for an actual summer program and alleviates the cost of transportation and use of facilities for a program. "If we are to level the playing field, schools need summer programs that provide children with at the very least, easy access to interesting and appropriate books" (McGill-Franzen & Allington, 2006, p. 2).

Although the lack of books in low-income homes has been well documented in research studies, less attention has been given to the print environment of communities, the role of libraries in supporting print and digital media, and access to books for summer reading. (McGill-Franzen et al., 2016, p. 592)

Kim and White (2011) reviewed the study conducted by Richard Allington and his colleagues (2010) which provided 1,330 predominately Black and Hispanic low-income students from high-poverty schools in Florida with books over three consecutive

summers. Each summer participant received 12 self-selected books chosen from a book fair with a large selection of trade books. This intervention resulted in an improvement in reading skills, especially for high-poverty students. However, providing students books without direction or follow-up is not the best solution to summer reading loss, especially when kids choose the books themselves.

Additionally, an experiment conducted by Kim and Guryan (2010) allowed 400 high-poverty, rising fifth grade Latino students to choose 10 books from a book fair to read over the summer. The results of this study indicated no difference in fall reading scores between those who received books and participated in the summer reading and those who did not participate. This could be due to students choosing books that were above their independent reading levels and were too difficult for them to read. Of the 400 participants, 67 of the students chose books above their reading levels. Other studies have found that struggling readers are likely to select books they are unable to read, leading to frustration. Donovan, Smolkin, and Lomax (2000) conducted a study that examined the readability of self-selected books during recreational reading. Results indicate that low-ability children consistently selected more than 77% of their books above their reading levels. Children may not know how to select a book on their reading level or have access to appropriately leveled books. In addition, student interest may greatly impact the books selected for reading.

Reading books that are below a student's independent reading level increases confidence and develops reading fluency skills (McClure, 2014). Students at risk for summer reading loss require support and guidance to ensure they read books on their appropriate reading level to increase decoding, fluency, and comprehension skills (Kim

& White, 2011).

Audiobooks are another form of text that can be accessed within the home that engage students in higher level comprehension skills. They are especially beneficial for at-risk populations, and low-endurance readers tend to stay on task longer when reading electronic texts than when reading the same text in print (Pearman, 2008).

There is a relationship between the number of books in a child's home and their academic achievement. Summer learning loss among high-poverty homes and communities is attributed to the lack of access to books and other reading materials and resources within the home. Minimal access to books automatically results in decreased reading activities and experiences and thus attributes to summer reading loss. Providing appropriate reading materials that stimulate student interest levels aims to fill the resource gap with hopes of increasing reading outcomes during the summer (Stein, 2016).

Books within the home establish a passion for reading within children and create a gateway towards learning. Access to books and reading for pleasure creates a positive learning attitude (Evans, Kelley, Sikora, & Treiman, 2010).

In-Home Parent Led Summer Reading

Parents are an essential element to student learning and reading development. Since parents and teachers have common goals, it is recommended that teachers teach parents the same instructional strategies used in the classroom to implement in the home as a beneficial learning practice (Blanton, 2015).

Kim (2006) conducted an experiment addressing a voluntary summer intervention for teachers to assist students with maintaining reading skills during the summer by facilitating lessons at the end of the school year to target reading comprehension

strategies. The strategies shared by teachers could be used at home or during independent or silent reading. In addition to utilizing the strategies, teachers requested for parents to listen to their children read and provide feedback by recording and rating their child's fluency. Kim and White (2008b) conducted a replication of this experiment with four groups of third- through fifth-grade minority students with an average of 38% receiving FRPL. Teacher and student participants were randomly assigned to one of the four groups. The four groups were categorized by:

- Matched Books Only: Books provided on student reading level and interests.
- Matched Books with Oral Reading: Books provided on student reading level and interests as well as lessons and strategies provided only in the area of oral reading.
- Matched Books, Oral Reading, and Comprehension Strategies Instruction: Books provided on student reading level and interests as well as lessons provided on use of oral reading and comprehension strategies.
- Control group receiving books in the fall after posttest and no other teacher or parent scaffolding.

Matched books were identified using a reading preference survey. Teachers administered a survey that required students to rate and order their level of enjoyment when reading materials from various categories. In September, another survey was administered to program participants to confirm whether the interventions increased reading skills at home or increased book access. The survey requested students to rate how often they engaged in the five reading comprehension activities and how many books they had access to within the home during the summer. The Iowa Tests of Basic

Skills (ITBS) was used to measure the overall growth in reading achievement over the summer. Oral reading fluency was measured using the Dynamic Indicators of Basic Early Literacy Oral Reading Fluency (DIBELS-ORF) subtest.

At the end of the school year, prior to the start of summer, the classroom teachers provided three separate lessons to support the students over the summer. Lesson one focused on re-teaching five comprehension strategies that students were taught throughout the year. The strategies were modeled to help students understand their reading. These strategies included rereading, making predictions, asking questions, making connections, and summarizing. Lesson two focused on reading fluency. Teachers emphasized the importance of how reading fluency impacts one's overall reading comprehension skills. Lesson three provided additional instruction and practice of the reading comprehension strategies, fluency practice, and how to complete the postcard to provide feedback of the interventions used during the summer.

Students assigned to the matched books only group received a teacher lesson that did not include comprehension strategies or fluency instruction. Those assigned to matched books and oral reading received two teacher lessons that did not include comprehension strategies instruction. Students assigned to all three (matched books, oral reading, and comprehension strategies) received all three lessons. The control group received alternative reading instruction that did not include comprehension or reading fluency instruction.

In addition, each book was accompanied by a postcard to be filled out by a parent or guardian to encourage students to read over the summer. The context on the postcard varied depending on the group to which the student was assigned. Evidence from the

study shows the intervention had a positive impact on student reading activity. There were significant differences between the control group and the treatment group which received matched books, oral reading, and comprehension strategies instruction. The oral reading results were similar for students in the control group and those in the matched books only group. These results suggest that just providing book access without instruction does not have a great impact on reading achievement. Students in the treatment group outperformed students in the control group on the ITBS assessment with a learning advantage of 2.5 months. Students in the matched book and oral reading group also performed higher than the control group on the ITBS. However, scores were not significant. Results did not provide evidence as to whether or not oral reading instruction alone improves overall reading performance. Oral reading fluency, according to the DIBELS-ORF assessment showed similar scores between the control group and two of the other treatment groups. ITBS results for low-income students in the control group and the full treatment group (matched books, oral reading, and comprehension strategies instruction) showed gains equivalent to 4 months.

The findings of this study suggest that voluntary reading over the summer can produce progress in reading achievement when books match student reading levels and interest and if parents and teachers offer scaffolding support in oral reading and comprehension. Just providing students with books does not have an impact on student achievement. Students who only received matched books for the study did not exhibit any gains even when matched with their reading level and interests. When considering a voluntary reading initiative, teachers should think of ways to foster diverse reading and provide scaffolds that will result in a positive impact of reading. The researchers created

a checklist to consider when implementing a voluntary reading summer option. The recommendations include teaching lessons that model the use of comprehension and oral reading strategies for families before the end of the school year, provide at least eight books matched to student reading and interest levels, send a postcard home to each family during the summer to remind them of their participation and what they should be doing, send a parent letter requesting that they listen to their child read over the summer and provide feedback, and ask parents to return the postcards to ensure that voluntary reading has been used throughout the summer (Kim & White, 2008a).

Mitchell and Benjey (2014) discussed a study that examined the impact of Helping Early Literacy with Practice Strategies (HELPS), a reading fluency intervention program, when implemented by parents at home during the summer. The study evaluated the implementation of the HELPS program while monitoring parent mastery of the tutoring skills prior to implementation, implementation integrity, and use of the intervention. HELPS is a structured reading program that incorporates eight evidence-based strategies to improve reading fluency. The strategies include

- structured, repeated readings of ability-appropriate text;
- having students listen to a more skilled reader read aloud, such as an adult (i.e., model reading);
- systematic error-correction procedures;
- verbal cues for students to read with fluency;
- verbal cues for students to read with comprehension;
- goal-setting (i.e., practicing text until a predetermined performance criterion is met);

- performance feedback, combined with graphical displays of student progress; and
- use of systematic praise and structured reward system for student reading behaviors and successes (Mitchell & Benjey, 2014).

Seventeen rising second- and third-grade students from one elementary school participated in the program. At the time of the study, student FRPL eligibility could not be acquired. However, 34% of the elementary school received FRPL.

Parents received a 2-day training to teach the HELPS program implementation procedures and to ensure overall understanding of the program. The first day of training was designated for teaching and modeling evidence-based reading fluency and how to implement the instructional components of the program. Day two of training focused on parents implementing the full practice. Before parents were allowed to implement the program with students, they were required to show mastery of the protocol during two practice sessions.

All student participants completed pre and posttesting using the Wechsler Individual Achievement Test (WIST-III) to assess math and DIBELS-ORF, Gray Oral Reading Test (GORT-IV), and the Test of Word Reading Efficiency (TOWRE) to assess reading skills. Based on the pre and postassessments, students showed significant improvements on all four assessment measures. Results indicated that parents mastered the strategies of the HELPS program and implemented the intervention with fidelity.

Parents committed to implementing the program at least three times per week for 10-minute sessions. Based on questionnaire results, parents adhered to the request, which equated to approximately 28.9 minutes of HELPS sessions during the course of the study.

Parents noted that the HELPS program helped to improve their child's reading skills.

Positive learning environments within the home, incorporating parents into school activities, and establishing strong relationships between school, family, and community are avenues for parental involvement to impact student achievement. However, identifying how to promote parent involvement in the school and home setting is a greater challenge. A summer text messaging program, Pro-Tips, was spearheaded to support parents as partners in promoting literacy over the summer to reduce summer learning loss. The participants in this program were first- through fourth-grade students from two diverse elementary schools. Nearly 50% of the participants were eligible for FRPL. Families who agreed to participate in the Pro-Tips program were higher performing on their standardized reading assessments when compared to families of nonparticipants. Minority students and those eligible for FRPL were also more likely to opt out of the program than other students. This is evidence that increased recruitment efforts are necessary when focusing on students from within these specific demographics.

Students assigned to the treatment group within the study received a total of 18 text messages throughout the months of July and August at approximately two messages per week. Text messages were translated into Spanish for limited English speaking families. All parents, including nonparticipants and those assigned to the control group received text messages through July and August regarding school-related events. Pro-Tips provided parents with information about literacy enrichment activities that families could participate in over the summer. It also provided resources and information about the importance of parents encouraging reading within the home over the summer.

Reading outcomes were measured using STAR and Strategic Teaching and Evaluation of

Progress (STEP) assessments. Parent engagement was analyzed by measuring whether or not the parent involvement during the summer transferred throughout the school year, with study participants becoming more involved in school-related functions following the study. Parent surveys were also conducted to collect data on the technical side to ensure parents received all of the intended text messages and the frequency in which parents and students participated in the recommended literacy activities.

Sixty-nine participants responded to the survey. Parents within the treatment group were less likely to complete the survey than those in the control group. Results from the study indicated a positive outcome for upper elementary school participants on the STAR and STEP assessments. There were no significant changes in the assessment scores among primary level elementary school participants. Parent engagement increased for specific types of involvement such as parent-teacher conferences. Involvement did not transfer into all school related functions (Kraft & Monti-Nussbaum, 2017).

Measures Used to Investigate the Effect of Summer Reading Loss

There are various measures and accountability systems used to investigate the effects summer has on reading. Current systems “fail to recognize the successes and focus, instead of the apparent failures” (McGill-Franzen & Allington, 2006, p. 2) and “the type of measures used to evaluate summer learning loss may impact the results” (Sandberg Patton & Reschly, 2013, p. 739). Global achievement scores from standardized tests are often used. The standardized assessments used to measure the impact of summer reading are not designed to offer adequate information about individual change during a short time period, which leads to mistaken deductions when analyzing the summer achievement gap (Baker & Good, 1995; Sandberg Patton &

Reschly, 2013).

Sandberg Patton and Reschly (2013) conducted a study that used the Reading Curriculum Based Measurement (R-CBM), specifically DIBELS, to examine the change in oral reading from spring to fall. CBMs are sensitive to the effects of summer break; and issues connected to using global, standardized, norm-referenced achievement tests can be avoided. R-CBM allows for not only focusing on learning loss but also recoupment time for reading skills, as it tracks progress made over time within the early weeks/month of school. This study also aimed to investigate the differential loss based on demographic factors such as FRPL eligibility, special education status, and ELL status and the impact on oral reading change over the summer.

In this particular study, 317 students in second through fifth grades were assessed using the DIBELS-ORF. Participants were assessed using the same three reading passages in the spring and fall semesters to ensure a direct comparison of results within that time frame. Of the 317 students, 70% were eligible for FRPL, 61.2% were White, 11.7% were Black, 21.1% were Hispanic, and 6% were other.

Results showed a significant but small learning loss for second- and third-grade students. Second-grade participants lost an estimate of five words read correct (WRC) and third-grade participants approximately nine WRC. Even a loss this small can have a detrimental impact on students. If at the beginning of school, students began increasing their oral reading fluency rate at the recommended rate of 1.66 words per minute, this would equate to a recoup time of 4 weeks, whereas it would result in a recoup time of 8 weeks for third-grade students. Fourth- and fifth-grade students did not experience any summer reading loss.

Examining summer reading loss as a whole provides limited information. Differential loss hones in on specific groups of students who are disproportionately impacted and are deemed at risk for poor outcomes based on their varying statuses. Low-income and special education second-grade students exhibited a differential loss. The demographics of the second-grade students participating in this study included a racial/ethnic makeup of more Hispanic students, a higher percentage of ELL students, and a greater number of students eligible for FRPL. Second grade FRPL students lost seven WRC, whereas second grade non-eligible FRPL students experienced no significant decrease. This decline could result in approximately six weeks of recoup time. A continual loss over multiple summers among high-poverty students can result in a 2- to 3-year deficit in reading skills (Sandberg Patton & Reschly, 2013).

Magpuri-Lavell, Paige, Williams, Atkins, and Cameron (2014) conducted a study that examined the impact of the Simultaneous Multi-Sensory Institute for Language Arts (SMILA) approach to teaching reading and the extent to which it enhances reading proficiency. SMILA used an Orton-Gillingham based multi-sensory methodology to instruct students participating in the 4-week SRP. “The Orton-Gillingham approach employs multi-sensory techniques to teach language structures sequentially, explicitly, systematically and cumulatively” (Magpuri-Lavell et al., 2014, p. 364). The method follows a direct instruction format that addresses phonemic instruction and application of phonetic rules to teach reading and build reading proficiency. The study sought to identify the method’s effect on student ability to apply word recognition skills and on sound-symbol knowledge understanding and to determine if the gains students make increase proficiency in oral reading fluency.

Sixty-nine students from a large urban city attended SRPs. Thirty-nine of the students ranging between 7-11 years of age were selected at the conclusion of the reading program as the treatment group for the study. All students were provided an estimate of approximately 60 hours of reading instruction during the month of June, using the SMILA approach. All participants were administered a pre and postassessment. Students selected for the treatment group scored in the 25th percentile or below on the Fundamental Literacy Index (FLI) of the WIST. The WIST was used as the pre and postassessment to measure reading progress in sound symbol relationships and accuracy and automaticity. Great Leaps Narrative Reading Passages were used as the pre and postassessments to measure student ability to read grade level text. Each student was instructed by a SMILA trained instructor with 10 years or more of experience teaching reading using the SMILA approach. Results from the study revealed significant growth in regular word knowledge, regular and pseudo sound-symbol relationships, and oral reading fluency. However, no significant change was determined for reading pseudo words. Based on the study, the SMILA approach could be an effective approach for struggling readers and could potentially help counter summer reading loss since it hones in on the foundational skills needed for successful reading. Students who received intensive direct instruction using the SMILA approach made gains in all of the reading competencies that were assessed. The study posed the hypothetical assumption that the lack of reading achievement across the U.S. could be due to the lack of appropriate instruction in the foundational reading skills during the early years (Magpuri-Lavell et al., 2014).

Characteristics of Effective Summer Learning Programs

According to Terzian, Moore, and Hamilton (2009), “to be effective, summer learning programs tend to balance educational activities with activities typical of summer camps, such as games and sports” (p. 16). Summer programs should also provide a hands-on interactive approach using enrichment activities. Programs that positively impact at least one child and/or adolescent outcome share several characteristics. These characteristics include

- **Make learning fun** by providing academic and enrichment activities that are relevant and engaging. Physical and recreational activities should be embedded into the program schedule with additional activities to include field trips, technology, art, and drama.
- **Ground learning in a real-world context** by connecting academic concepts to real world activities.
- **Integrate hands-on activities** by using an interactive and experimental approach to teaching. Use games to teach a skill, along with group projects and field trips.
- **Content should complement curricular standards** by integrating what the students learn throughout the school year into the summer lessons.
- **Hire experienced, trained teachers to deliver the academic lessons** for more favorable outcomes.
- **Keep class sizes small.** Smaller class sizes are more effective and offer greater opportunities for small group/individualized instruction.

Combining academic instruction with sports and other physical activities is

effective for programs serving disadvantaged students, those students least likely to participate in afterschool activities during the school year. Effective summer programs build partnerships and engage in early collaboration with prominent stakeholders and data are used to inform the planning and development. Summer programs should design their program around desired goals and objectives, hire highly qualified teachers, and provide quality training and staff development. “To boost participation rates and ensure program success, the Harvard Family Research Project recommends that programs develop strong, positive connections with the youth participants and their families and form ongoing, mutually supportive relationships with schools” (Terzian et al., 2009, p. 20).

Based on literature reviews and review of 43 summer learning programs, effective and promising summer programs for disadvantaged youth share three critical characteristics. They are affordable and accessible, involve parents, and bring in community members. Programs were free of charge and offered a full day to reflect work hours of participating families. Transportation, breakfast, and lunch were provided. Programs that had high parent involvement usually resulted from a greater impact on students. Involving the community builds community involvement that results in partnerships and resources (Terzian et al., 2009).

Additionally, Almus and Dogan (2016) emphasized the characteristics of effective summer programs include small class sizes, differentiated instruction, high-quality instruction, hiring experienced and trained teachers, individualized learning, aligning summer curriculum with year-long curriculum, implementing curriculum that compliments curriculum standards, engaged learning activities, hands-on learning,

requiring parent involvement, conducting a program evaluation, and being affordable and accessible (p. 2).

Studies reveal that summer programs that produce gains or halt summer learning loss are implemented over the entire summer or at least a great portion of the summer vacation (Luftig, 2003). Studies with evidence of a reduction in summer learning loss point to SRPs that address the importance of motivating students through student interest, student choice, student ownership, and teacher/parent scaffolding. Scaffolding consists of supports offered to students during the learning process which can include booktalks, vocabulary development, reading ladders, book club and other strategies deemed instructionally appropriate (Whittingham & Rickman, 2015). Booktalking is a strategy that targets student interests and provides scaffolding. Booktalking provides a quick overview aimed to introduce the book and spark student interest. The goal is to reach reluctant readers by introducing them to various books using booktalking as a strategy. It is important that educators presenting the booktalk use high energy expression that would capture the attention of students and encourage them to read the book being reviewed. Impactful booktalking by school librarians helps create the intrinsic motivation students require to read independently during summer break and other out-of-school time (Whittingham & Rickman, 2015). Dahl (1988) showed that when booktalks were used during summer reading, the number of pages students read throughout the summer increased (Whittingham & Rickman, 2015). When booktalks were not incorporated, it decreased the number of pages read (Whittingham & Rickman, 2015). Student voice and choice and honing in on student interests are powerful methods used to ignite extrinsic motivation (Becnel et al., 2017).

E-books can be used to support literacy development by providing scaffolding support. E-books provide a multimedia approach to support reading. The interactive text features help increase reading fluency and build vocabulary using the dictionary and its animated illustrations. Teachers are able to scaffold vocabulary while the student is interacting with the e-book. Using e-books instead of printed reading material motivates students to engage in reading. It increases comprehension skills by embedding links in the reading that will provide background knowledge of the vocabulary word or content. Some e-books provide pronunciation support which allows the student to spend less time on trying to decode the word and promotes greater comprehension skills (Barnyak & McNelly, 2015).

James Kim, the National Summer Learning Association, established the ABC's of Summer Learning as a staple to effective SRPs. The ABC's of learning include, "Access to Books, Books matched to the reader's ability level and Comprehension monitored and guided by an adult" (Stein, 2016, p. 49). Summer reading also requires intrinsic motivation. It is a significant indicator of higher level reading comprehension and reading amount. Students who are intrinsically motivated to read see reading activities as positive and rewarding (Schaffner & Schiefele, 2016). The missing element to an effective summer programming is student interest paralleled with teacher/parent scaffolding (Kim & White, 2011).

Balsen and Moore (2010) summarized the research on successful summer learning into four main categories: impact of summer learning loss on disadvantaged youth, access to books and time devoted to reading, importance of successful reading experiences, and the impact of innovative SRP.

As mentioned previously, high-income and low-income students make similar academic progress and gains during the school year. The other factors and experiences during out-of-school time are the ones that halt student achievement and negatively impact high-poverty students' continued academic success. The limited book access, positive reading practices, and connection to community institutions that help with student development among high-poverty students significantly impact our students' overall continued learning. The amount of access a student has to books directly impacts the amount of reading they will engage in over the summer. Students from high-poverty homes and neighborhoods have less access to books, therefore resulting in less reading and a decline in skills learned throughout the year. Evidence proves that students who read more read better, write better, and have a more developed vocabulary. Successful reading experiences are critical in developing reading proficiency. When students have an opportunity to engage in reading activities, it builds their background knowledge and helps ignite their desire to participate in more independent reading. The key predictors to reading development are increased opportunities to read and experiences in reading and writing. Innovative SRPs like those offered at the public library create opportunities for students to engage in reading and benefit from programs that offer a combination of youth development and academic enrichment.

Members of a community team used this information to support their summer literacy program. They decided to focus on developing a program that would be of interest to students and would allow success regardless of socioeconomic background. The collaborative team came together with examples of summer programs taking place at each of their schools. They focused on the components of the program that worked and

the areas that required some additional planning. It was determined that just writing the titles of books read in a book log was not an effective strategy. In order for reading to be effective, students would need to provide a written summary of what they read during their independent reading time (McClure, 2014). The team adopted a modified program where students selected and completed reading response activities from a bingo card of choices. Suggested reading lists were provided to encourage the students to read various genres of literacy. The efforts of the public library to implement a program that was motivating to students resulted in an increase of participants in the program.

It is important that families place value on literacy within the home by spending adequate time reading with their children and using reading materials. High-poverty parents require additional guidance and support on ways to participate in literacy activities for their children. It is imperative to encourage families to embed activities that are fun and extend positive parent-child relationships rather than structured activities similar to those in the classroom setting (Mraz & Rasinski, 2007). Authentic reading experiences can be provided during the family's regular daily routine. Children can read in the car on the way to their destination, while waiting during a doctor's appointment, or on vacation. Family participation in literacy with their child is valuable, especially as it pertains to reading over the summer. The following elements contribute to successfully engaging and promoting family literacy participation:

- An Established Sense of Community: Each family member can have something to contribute to students while reading over the summer. Know the strengths of the family member and what they can offer and use that to support the student.

- Teachers' Effective Interpersonal Skills: Enhance the teacher-parent rapport. A teacher's interpersonal skills can affect the parent's desire and willingness to participate.
- Ongoing and Varied Communication: Teachers should use multiple forms of communication to connect with families. These could include phone calls, emails, newsletters, or face-to-face.
- Consistent Recruitment of Parent Participation: Provide ongoing opportunities for parents to participate in their child's learning during the school year. This will encourage participation during the summer months.
- The Suggestion of a Variety of Literacy Activities for the Home: Provide concrete suggestions on how the family can support the student at home.
- Teachers' Understanding of Family Challenges: Be aware of family circumstances that could make participation in literacy activities challenges (Mraz & Rasinski, 2007).

"In 'Bridging the Summer Gap,' McGill-Franzen and Allington proposed that when students have a chance to interact and engage in books they select on topics of their interest, they "develop extensive background knowledge that can scaffold their independent reading and sustain their engagement" (McClure, 2014, p. 33).

Alexander et al. (2001) suggested that summer programs developed specifically for high-poverty students should include academics, physical activity, and enrichment opportunities. Advantaged students participate in organized sports and extracurricular activities that teach them skills that transfer into the classroom. Offering similar opportunities in summer programs provides disadvantaged students with comparable

skills. They should be engaging and nonpunitive. For most disadvantaged, low-performing students, school is not fun and viewed as punishment due to failure. It is important to put a positive spin on the summer program to increase motivation for attendance.

Denton (2002) outlined seven features to improve the effectiveness of summer school programs and help struggling students avoid failure. This report suggested that summer school should be an integral part of a year-round program of extra time and extra help. It should be available to all failing students at no cost to parents. Most states provide funding to support extended learning for students in this category. Summer school programs should meet clear standards for quality, program length, and scheduling. For example, some programs are required to serve students for 4 weeks to ensure ample time to learn curriculum. Summer school programs should respond to individual needs through the use of innovative and creative teaching strategies. This can be done by having guidelines and requirements for teachers wanting to teach within the summer school programs.

Summary

Deficits in reading have been linked to academic failure in all academic areas including math and decreased graduation rates (Luftig, 2003). Students not reading on grade level by third grade are four times more likely to become high school dropouts (Blanton, 2015). It has also been revealed that the amount of time a student reads directly influences the overall impact of summer slide (Becnel et al., 2017). Other components influence academic development and progression. McGill-Franzen et al. (2016) found that “a home library is as important as the father’s occupation in predicting educational

outcomes” (p. 586).

The United States Department of Education (2002) reported that eight million students in grades 4-12 exhibit deficits in reading and one in four lack the literacy skills necessary to successfully complete high school courses. Due to these astonishing data, there is an overwhelming need for the implementation of literacy programs to improve reading skills.

“As a harbinger of the future, a steadily increasing achievement gap translates into intergenerational poverty and diminished human potential” (McGill-Franzen et al., 2016, p. 585), causing the reading achievement gap between high-income and low-income students to remain an ongoing topic in education (Luftig, 2003). The implementation of summer learning programs helps to decrease the achievement gap by providing enrichment experiences and exposing high-poverty students to meaningful activities that ignite learning and close the gap in all core subject areas (Browne, 2016 & 2017).

As a result of the achievement gap among advantaged and disadvantaged school age children, a big push for policy change has been put into place to focus on developing early intervention programs to help prevent the achievement gap upon entering school. High-poverty students participating in effective learning programs before starting formal school demonstrate more developed skills than similar students who have not engaged in those same learning opportunities. Consequently, children from non-poor households are more likely than children from low-income homes to participate in summer programs. There is a strong relationship between poverty and program participation (Edmonds et al., 2009).

The connection between SES and summer learning is not undeviating. The major variance between summer learning differences is evident in the most disadvantaged and advantaged quintiles (Borman & Dowling, 2006). Students in schools serving high-poverty populations have average losses in reading during the summer months. Schools serving more advantaged populations experienced gains (Burkam et al., 2004).

Changes in reading practices over the summer to improve comprehension greatly impact student academic performance, as reading comprehension is required to succeed in almost all academic subjects (Schaffner & Schiefele, 2016). Practice in reading is required in order to improve overall literacy development (Rasinski, Homan, & Biggs, 2009). When reading practice does not occur during the summer, it has a negative impact resulting in regression of literacy skills (Blanton, 2015). “The Matthew Effect, described in the gospel of Matthew as the ‘rich get richer and the poor become poorer,’ is evident in reading development” (Blanton, 2015, p. 2). Students who are rich in reading ability continuously improve their reading skills and become even more proficient in their overall reading performance. Students who are poor in their reading skills are so discouraged in their abilities that they read less which results in greater deficits (Blanton, 2015).

SRPs often omit utilizing various forms of reading materials, including electronic reading options. More often, SRPs only read books, not grasping the impact of other reading materials such as magazines, comic books, and newspapers (Lu & Gordon, 2008). SRPs that take on a less formal structure have a greater opportunity to use the program for leisure reading and other motivating factors that contribute to a student’s desire to read.

Family income is a determining factor of student growth and achievement. “The cognitive development of children from economically disadvantaged families lagged behind that of their wealthier peers as the children began kindergarten” (Burkam et al., 2004, p. 3).

Social Capital Theory (Bourdieu 1984) which posits that families in poor communities do not have the material resources, the experience or knowledge of schooling through the highest levels, or the political influence, alliances or privileges to provide the foundations for success in schooling may explain this summer slowdown. (Vale et al., 2012, p. 4)

However, Evans et al. (2010) challenged this argument indicating scholarly culture has a greater impact on education than economic or social capital.

The stressors that impact students and families before starting formal schooling do not switch off when school starts. There is a continued negative impact as children progress through the school years. The achievement gap will continue to widen throughout the academic years for reasons disassociated to school-related concerns (Alexander et al., 2001).

The continuous implementation of summer programs is necessary to address the needs of high-poverty children during out-of-school time. Since high-poverty neighborhoods are not as safe as middle class neighborhoods, these programs are critical for safety reasons alone (Lauer et al., 2006). SRPs help to increase literacy skills which can ultimately eliminate the achievement gap. Providing learning opportunities for high-poverty students over the summer exposes them to learning experiences they would not otherwise have and provides a safe environment during the summer. SRPs offer an

opportunity to increase academic skills. However, effective summer programs also extend opportunities for the youth to develop confidence and increase their overall self-esteem. Depending on the focus of the summer learning programs, they may also provide experiences for students such as a chance to visit museums or local businesses. These experiences also help to increase overall learning and contribute to closing the achievement gap.

Title I of ESEA was implemented in part due to information suggesting that high-poverty children were at risk for academic failure and required additional time to engage in educational activities to supplement what they learned during the academic school year (Lauer et al., 2006). Summer learning loss has existed for many years. However, researchers are focusing more on looking at the academic school year and summer separately to gain more information of how to eliminate the achievement gap (Sandberg Patton & Reschly, 2013).

Chapter 3: Methodology

Long summer vacations cause more than a halt in learning; they actually cause students to forget what they have learned during the school year. When learning is not extended over the summer, the achievement gap widens between higher and lower income students. With no opportunity to experience learning during the summer, the ability to catch up decreases (Denton, 2002).

Summer school is a summer learning program that helps struggling students improve their performance. The program produces more lasting benefits when they operate over multiple weeks for fewer hours per day (Denton, 2002).

This study examined a revitalized summer school program within an urban school district in the Commonwealth of Virginia. The summer school program served high-poverty students and provided remedial instruction focusing on skills students failed to master during the school year.

The school district used a hybrid model of school division employees as well as community and specialty teachers hired through a partnership with the YMCA to offer a variety of programming that provided academic and out-of-school time enrichment. The summer school programs operated for 5 weeks, 4 days per week, 6 hours per day. This included 2 hours of English language arts instruction, 1 hour of mathematics instruction, lunch, and 2 hours of enrichment opportunities to address the opportunity gap.

This chapter provides the methodology to examine the research questions. To study the impact of the summer school program on reducing summer reading loss in participants, the following research questions were asked. The first overarching question that directed this research was,

1. What is the impact of the summer learning program on the reading achievement level of high poverty students?

The second overarching question that directed this research was,

2. To what extent do the literacy strategies used during the summer school program impact reading achievement?

To answer the overarching question, the following sub-questions were addressed:

- a. What literacy strategies were used throughout the summer school program?
- b. Which literacy strategies had the greatest impact on student achievement?

Research Design

The research methodology for this study included curriculum trainer interviews, teacher perception surveys, MAP assessment data, and STAR pre and post reading assessment data. The researcher conducted interviews with the curriculum trainers for each of the middle school summer sites, and teacher perception surveys were completed by participating middle school literacy teachers. The teacher perception survey asked literacy teachers to gauge their perception on the impact the literacy strategies had on student reading achievement during the summer school program.

Spring and fall reading MAP assessment data were collected in MAP growth reports. The STAR reading pre/postassessment data were used to measure student reading comprehension and to monitor achievement and growth by the end of the summer school program. The STAR growth report was generated to show both achievement and growth scores.

Participants

Student participants in this study were identified using the following indicators: SOL scores, grades, attendance, and teacher recommendation. Participants eligible for the summer learning program were one or more grade levels below in reading and/or math according to winter MAP scores. Spring SOL scores were 400 or less in reading and/or math, and semester grades for reading and/or math were a C or below. A score of 400 on the reading SOL represents the minimal level of acceptable proficiency and 500 represents advanced proficiency. Eligible participants had chronic absenteeism as measured by being absent from school 10% or more days.

The study focused on approximately 40 randomly selected high-poverty middle school students from the seven middle schools throughout the district, grades 6-7, who were eligible to receive FRPL and were struggling or reluctant readers. Seventy-five percent of the students within the district are eligible for FRPL, 75% are African-American, 13% are Hispanic, 9% are White, and 1% are Asian.

The summer school model offered voluntary instructional and enrichment programs and recruited some students who chose to attend and others who chose not attend. Although participation was not mandatory, students were invited and strongly encouraged to attend based on the outcomes of the summer learning indicators.

Other participants for this study included literacy teachers and curriculum trainers. Teachers selected for the program were hired through a modified application process and were highly recommended by their building level administrators. Teachers provided academic instruction with a 20:1 pupil/teacher ratio. Curriculum trainers selected for the study were hired through the school district's summer school partner, the

YMCA via the Power Scholars program.

Instruments

Multiple data collection instruments were used in this study. Data were collected using MAP assessments scores and STAR pre and posttests. The MAP assessments are computer adaptive achievement tests in mathematics and reading; only reading was used for this particular study. The MAP assessments were administered in the spring and again in the fall in the following school year. The reading component of the MAP assessment was used to assess summer reading loss or gains over the summer months. The assessment was used as an indicator of the impact of summer school instruction on students who failed to master skills during the school year.

MAP produces highly accurate data on student academic growth and reliable detailed information about what the student already knows and is prepared to learn. This information is determined through the RIT scale (for Rausch Interval Unit). The RIT scale was developed by Northwest Evaluation Association (NWEA) over 30 years ago according to Item Response Theory Principles. Before items are included in the MAP assessments, they are trialed with multiple students across the nation. NWEA has used in-house researchers to conduct validity research, which has not been peer reviewed. NWEA test and retest studies, which evaluate scores from the same students after a lapse of several months as opposed to several days, produce reliability indices that have consistently been above what is considered statistically significant (Bjorklund-Young & Borkoski, 2016).

The STAR reading pre/postassessment data were used to measure student reading comprehension and to monitor achievement and growth by the end of the

summer school program. The STAR assessment is a computer adaptive test that measures reading comprehension. The STAR growth report was generated to show both achievement and growth scores. The STAR growth report showed the researcher the change between the pre and postassessment scores for participating students. The achievement scores reported on the STAR report indicates whether student performance is above, below, or at standard to grade level expectations. The growth scores show the progress students make over time. The reliability on the STAR reading assessment was determined using internal consistency and the test-retest correlation coefficients in a random national sample of administered tests. Internal consistency was very high. The STAR reading assessment is aligned to curriculum standards at both the state and national levels (Renaissance Learning, 2013a).

Renaissance Learning continually investigates the correlation or statistical link between scores on STAR Reading Enterprise and scores on other recognized, established measures of different aspects of reading achievement. These measures include survey achievement tests, diagnostic reading measures, and state accountability tests. (Renaissance Learning, 2013b, p. 2)

In addition, teacher perception surveys were administered, and interviews with curriculum trainers were conducted. The teacher perception survey can be found in Appendix A, and the curriculum trainer interview questions can be found in Appendix B. The teacher perception survey and curriculum trainer interviews were completed at the end of the summer school session to gain insight into the overall summer school experience from the provider perspective. The teacher perception survey was a Likert

scale instrument with categories ranging from “strongly disagree” to “strongly agree.” It measured the reading curriculum used along with the instructional practices embedded in the literacy block. An analysis was done for each individual item to adequately evaluate the impact of the program for future planning. Additionally, there were teacher demographic questions identifying the teacher’s summer school site assignment, years of full-time teaching experience, and area(s) of certification. One open-ended question was included on the teacher perception survey asking literacy teachers to expand on the additional literacy practices they incorporated into their daily literacy instruction.

The curriculum trainer interview consisted of questions about the literacy strategies presented during curriculum training and the expectations for teachers in terms of literacy instruction during the summer school literacy block. In addition, the interview questions included demographics of the curriculum trainer.

The survey and interview instruments were tested for reliability and validity using the Lawshe method for content validity. Experts in the area of summer program planning and development were asked to examine the surveys to determine if they were appropriately constructed and if they would provide data to answer the research requirements for this study. The researcher distributed a google doc to the summer planning committee. Each committee member was asked to examine each question on the teacher perception survey and curriculum trainer and rate them as “essential,” “useful but not essential,” or “not necessary.” Any question perceived as “essential” by more than 75% of the summer planning committee indicated content validity.

Procedures

The student participants were identified for this study based on the established

summer school indicators determined by the summer school planning team. Students meeting these criteria were invited to participate in the program. Once students received a letter of invitation, parents were responsible for registering their child for the program. After the registration period, a list of students attending the summer program was compiled and summer school site assignments determined. Of the invited students, 40 were randomly selected to participate in the study.

Prior to the start of the program, all students had completed the spring MAP assessments along with their peers across the district. Using the spring benchmark as a criteria component eliminated repetitive assessments that could lead to invalid results. In addition, the student participants took the end of the year SOLs in reading and math as a determining factor of being invited to the summer learning program.

The week before summer school started, teachers and staff received 2 days of curriculum and program expectation training. This training was used to introduce the summer school curriculum and to provide an overview of the summer school program expectations.

At the start of the program, students were administered the STAR reading and math preassessment to gather baseline data. The preassessment was used to identify level of performance prior to teaching the curriculum. For this study, only the results of the reading preassessment were used. Students engaged in a 5-week, 4-day-a-week, 6-hour summer learning program that focused on reading and mathematics academic areas along with enrichment opportunities. Students received 2 hours of reading instruction and 1 hour of math instruction using the Bellexcel curriculum.

At the close of the program, all students completed the STAR reading

postassessment. The STAR reading postassessment data were compared to the STAR reading preassessment data to measure any academic gains and to determine if the summer learning program had any positive impact on reading achievement.

An informed consent letter was given to willing staff participants explaining their role in the research, protections provided, and the overall benefits their feedback could have on future summer school programs. The researcher disseminated and collected informed consents from each willing participant.

Literacy teachers were asked to complete an end-of-program teacher perception survey. This survey was used to provide feedback about the reading curriculum and the literacy strategies used throughout the summer school program. It examined teacher perceptions on which literacy strategies had the greatest impact on reading achievement. Each item on the teacher perception survey was used to gauge the most commonly used literacy strategies and their perceived effectiveness on reading achievement. Interviews were conducted with the curriculum trainers to gather insight on the literacy strategies presented during the curriculum training and to gain insight on the expectations for the literacy instructional block. The interview responses provided insight on what strategies should be incorporated to assist with reading achievement and if those strategies were used, what impact did they have?

Student participants completed the fall MAP assessment with their peers upon their return for the 2019-2020 school year. The reading MAP scores were analyzed to compare spring 2019 and fall 2019 student performance and to determine if students experienced any summer reading losses or gains as a result of their participation in the summer school program.

Data Collection

Student data collected in this study included spring and fall reading MAP scores and STAR reading pre and postassessment. Students take the MAP assessment three times a year (fall, winter, and spring), like all middle school students in the studied school district. Students were administered the spring reading MAP assessment, and scores were used to identify students in need of summer learning programs. Reading MAP was administered again in the fall following participation in the summer learning program. MAP growth reports were collected for each student and data compiled on a spreadsheet to display individual growth scores. Scores provided a view of how much a student has grown over time and what students are ready to learn.

STAR reading pre/postassessments were used to measure student growth over the summer. Individual student scores were compiled by the STAR reading growth report. Scores for all students participating in the summer school program were compiled using a spreadsheet. The information on the spreadsheet was used to help determine the impact of the summer school program.

Teachers who gave consent were asked to complete an end-of-program teacher perception survey. Teachers completed the survey using google forms, a secure online survey tool.

Curriculum trainers participated in on-site, semi-structured, face-to-face interviews once summer school was over to provide feedback about the curriculum training. The semi-structured interviews consisted of a series of predetermined questions to be answered by all curriculum trainers. Follow-up and clarifying questions were asked as well, when needed. Responses were captured using a word document and responses

from the summer school principals compiled to hone in on commonality across sites. In addition, interviews were recorded and transcribed using the Trint's automated transcription tool.

Data Analysis

Qualitative methodologies were used to answer the research questions for this study. The MAP assessment was disseminated at each middle school within the district for reading and math. This study only focused on the reading MAP scores and used the Rasch Unit scale (RIT) score to measure student growth in reading. The RIT score does not measure mastery; instead, it provides insight on what students are ready to learn. The participating students' end-of-year spring scores were compared to the current school year's beginning of the year fall RIT score. These data provided evidence of summer reading loss or summer reading gains. This information helped measure the impact of summer school on summer reading loss.

The researcher examined the STAR reading pre and posttest scores, MAP RIT scores, teacher perception surveys, and curriculum trainer interview responses.

Further data analysis will be addressed for each research question.

1. What is the impact of the summer learning program on the reading achievement level of high poverty students?

This research question was answered using two instruments. First, individual reading MAP scores administered for spring benchmark and fall benchmark for students who were invited to attend summer school. The RIT scale is ideal for tracking student academic growth within the school year and across adjacent school years. These results were used to determine the impact of summer school on summer reading loss.

Second, the STAR pre/postassessments in reading were used to determine effect. Individual scores were collected; and the percentage of students who made growth, remained the same, and/or declined in reading was captured. These data helped determine if there was a positive or negative impact on summer reading as evidenced by performance on assessments.

Statistical graphics were used to show comparisons of spring and fall MAP scores and STAR pre and postassessment data. A comparison table was used to compare students spring and fall MAP scores.

2. To what extent do the literacy strategies used during the summer school program promote academic achievement?

To answer the overarching question, the following sub-questions will be addressed:

- a. What literacy strategies were used throughout the summer school program?
- b. Which literacy strategies had the greatest impact on student achievement?

This research question was answered using two instruments. First, responses from interviews conducted with the curriculum trainers were compiled. The questions asked on this instrument were the same for each trainer and offered insight on the literacy strategies presented during training and expected to be used during literacy instruction. Content analysis was utilized to determine common strategies presented and those observed being utilized during instruction.

Second, responses from the teacher perception surveys were compiled. The survey consisted of Likert scale questions and open-ended questions. Data collected from open-ended questions were analyzed using content analysis. Data collected from

the Likert scale questions helped identify common literacy strategies used during literacy instruction and perceptions on the impact the strategies had on increase reading achievement.

To analyze MAP and STAR pre/postassessments in sixth and seventh graders, a mixed design repeated measures was used. The dependent variable was test scores, and the independent variables were the grouping assignments. The assumption of the sphericity was checked prior to analyzing the results.

A narrative is included to present findings from the curriculum trainer interviews and to provide further explanation and detail to the findings.

Summary

This study sought to capture the impact summer school has on reducing summer reading loss. The study also identified literacy strategies that contribute to the reading achievement of participating students. Chapter 4 displays the data collected. Chapter 5 provides a thorough explanation of the data results, analyzes findings, and aligns the findings with the research provided in Chapter 2. In addition, Chapter 5 identifies limitations and delimitations and provides implications for practice and recommendations for future study.

Chapter 4: Results

The purpose of this study was to evaluate the impact of a revitalized summer school program on reducing summer reading loss in participants as measured by the RIT scores of the reading MAP assessment and STAR. The study also evaluated the impact literacy strategies used during the summer school program had on reading achievement as measured by a teacher perception survey and curriculum trainer interviews. The Teacher perception survey and curriculum trainer interview questions focused on the implementation of literacy strategies presented during the curriculum portion of summer school training. The research questions used to guide this study were

1. What is the impact of the summer learning program on the reading achievement level of high poverty students?
2. To what extent do the literacy strategies used during the summer school program impact reading achievement?
 - a. What literacy strategies were used throughout the summer school program?
 - b. Which literacy strategies had the greatest impact on student achievement?

The independent variable in the first research question was the summer school program. Students were selected for the summer school program based on their SOL scores, grades, attendance, and teacher recommendation. Eligible participants had to be one or more grade levels below in reading and/or math according to winter MAP scores. The dependent variables were the student's reading MAP scores and the pre and post STAR reading scores. The spring (end of school year) reading RIT score was compared

to the fall (beginning of the school year) reading RIT score to determine if there was any summer reading loss. The pre and post STAR assessment scores helped to measure the effect summer school had on reading achievement.

The second research question also dealt with summer school. The question was answered through the teacher perception survey and the curriculum trainer interviews. The teacher perception surveys and curriculum trainer interviews measured the implementation of specific literacy strategies and the impact those strategies had on reading achievement.

Data collected to answer Research Question 1 were analyzed using quantitative analysis, and data collected to answer Research Question 2 were analyzed using qualitative analysis.

Research Question 1

What is the impact of the summer learning program on the reading achievement level of high poverty students? The reading MAP RIT scores were used to gauge summer reading loss or gains of participating students according to spring (end of the year) and fall (beginning of the year) scores. The STAR reading pre/postassessment scores were used to measure the reading achievement and growth of students as a result of participating in the summer school program. Together, these data helped measure the effect summer school had on reading achievement for high-poverty students.

Quantitative Methodology

For this study, the evaluator randomly selected 40 participants, 20 sixth graders and 20 seventh graders using the systematic sampling method. The evaluator selected every fourth student from the list of participants with scores from both the STAR pre/postassessments and spring (end of the year) and fall (beginning of the year) reading MAP assessment. Prior to analyzing the results, the assumption of sphericity was measured using Mauchly's Test of Sphericity. "Sphericity is the condition where the variances of the differences between all combinations of related groups are equal" ("Sphericity," 2018, para. 1). This assumption was not met; therefore, Greenhouse Geisser Epsilons were reported. The assumption of sphericity is not met when there is a violation, which indicates the differences between the combinations of related groups are not equal. The Greenhouse Geisser Epsilons were used to combat the violation of the assumption of sphericity. Table 1 provides a summary of the descriptive statistics and Table 2 provides the repeated measure of overall student performance on the MAP and STAR assessments.

Table 1

Descriptive Statistics

Grade Level	Assessment	Mean {Pre}	Std. Deviation	Mean {Post}	Std. Deviation	N
6	MAP	201.10	18.92	198.15	16.68	20
	STAR	492.40	269.52	372.20	209.60	20
7	MAP	202.65	16.72	200.10	15.03	20
	STAR	451.55	231.37	445.50	217.01	20

Table 2

Mixed-Design Repeated Measure Results

Measure	Sum of Squares	DF	Mean Square	F	Significance	Partial ETA Squared
PrePost	43395.15	1	43395.15	7.093	.009	.085
Grade Level	32804.25	1	32804.25	5.362	.023	.066
Assessment	36451.40	1	34651.40	5.958	.017	.073

Overall, there were statistically significant differences in pre and post scores for both MAP and STAR pre/postassessments among sixth and seventh graders. The postassessments have lower mean values than the preassessments. There were statistically significant mean differences between pre and postassessments, $F(1, 76) = 7.093$, $P = .009$. On average postassessments were lower. There were statistically significant mean differences between sixth and seventh graders, $F(1, 76) = 5.362$, $P = .066$. Seventh graders had higher mean assessment scores than sixth graders. There were statistically significant mean differences in pre and post for both MAP and STAR assessments, $F(1, 76) = 5.958$, $P = .017$.

MAP RIT scores of 216 indicate on grade level reading for sixth grade. MAP end-of-year RIT scores < 206 suggest students are 2 years+ below grade level in reading. Participating sixth graders entered the summer school program significantly below grade level with a mean RIT score of 201.10. Scores decreased after participating in the summer school program, by a mean difference of 3 points. MAP RIT scores of 218 indicate on grade level reading for seventh grade. MAP end-of-year RIT scores < 212 suggest students are 2 years+ below grade level in reading. Participating seventh graders entered the summer school program significantly below grade level with a mean RIT score of 202.65. Scores decreased after participating in the summer school program by a

mean difference of 2.6 points. The variations of the standard deviations between both sixth- and seventh-grade participants show a very diverse range of scores with a relatively large spread of values away from the mean for MAP pre and postassessments. This indicates that the grouping of these students was poor and the scores were scattered. The results imply that the students did not take the assessment seriously, and the scores are not an accurate reflection of their actual performance.

STAR scale scores for the reading assessment range from 0-1,400. According to STAR pre scores, participating sixth-grade students entered the summer school program with a mean scale score of 492.40, which is equivalent to mid-fourth-grade reading proficiency. Participating seventh-grade students entered the summer school program with a mean standard score of 451.55, which is equivalent to end of third grade reading proficiency. Sixth grade postassessment scores of 372.20 are equivalent to a beginning of third grade reading proficiency level. while seventh grade postassessment scores of 445.50 is equivalent to an end of third grade reading proficiency level. These results indicate that the literacy instructional strategies and practices used during the summer school program had limited impact on participating student reading achievement. Sixth-grade participant mean scores dropped 120 points between the pre and postassessments. Seventh-grade participant mean scores dropped 6 points between the pre and postassessments. These results suggest that even though both grade levels dropped with pre and postassessment scores, the seventh grade drop was far less severe than sixth grade.

Analysis of MAP and STAR pre and postassessments in sixth and seventh graders using a mixed-design repeated measure was completed. The dependent variable was test

scores, and the independent variables were the grouping assignments of grade level and pre/post. The assumption of sphericity was checked prior to analyzing the results.

Table 3 shows the individual RIT scores for the reading MAP assessment for all 20 sixth-grade participants included in the randomly selected group. Table 3 includes concrete student pre/postassessment scores and the amount of loss and/or gains.

Table 3

MAP RIT Scores Before (Spring) and After (Fall) the Summer School Program—Sixth Grade

Participant	Spring RIT Score	Fall RIT Score	Loss/Gain
Student 1	208.0	208.0	0
Student 2	171.0	176.0	5.0
Student 3	219.0	207.0	-12.0
Student 4	225.0	223.0	-2.0
Student 5	221.0	211.0	-11.0
Student 6	209.0	200.0	-9.0
Student 7	179.0	179.0	0
Student 8	201.0	193.0	-8.0
Student 9	167.0	169.0	2.0
Student 10	172.0	178.0	6.0
Student 11	206.0	195.0	-11.0
Student 12	219.0	209.0	-10.0
Student 13	214.0	205.0	-3.0
Student 14	205.0	206.0	1.0
Student 15	206.0	198.0	-8.0
Student 16	226.0	234.0	8.0
Student 17	206.0	208.0	2.0
Student 18	175.0	196.0	21.0
Student 19	190.0	175.0	-15.0
Student 20	203.0	193.0	-10.0

When analyzing the data by grade, 45% of sixth-grade participants experienced no summer reading loss or made reading gains, while 55% experienced summer reading loss according to the MAP RIT scores. Growth scores ranged from 0-21 points, while the largest drop in score was 15 points. The median RIT score of the nine students who

experienced gain increased by 2 points, while the remaining 11 students decreased by a mean of 11 points.

Table 4 shows the individual RIT scores for the reading MAP assessment for all 20 seventh-grade participants included in the randomly selected group. Table 4 includes concrete student pre/postassessment scores and the amount of loss and/or gains.

Table 4

MAP RIT Scores Before (Spring) and After (Fall) the Summer School Program—Seventh Grade

Participant	Spring RIT Score	Fall RIT Score	Loss/Gain
Student 1	193.0	192.0	-1.0
Student 2	210.0	203.0	-7.0
Student 3	203.0	189.0	-14.0
Student 4	214.0	215.0	1.0
Student 5	210.0	205.0	-5.0
Student 6	204.0	201.0	-3.0
Student 7	218.0	215.0	-3.0
Student 8	205.0	205.0	0.0
Student 9	160.0	165.0	5.0
Student 10	202.0	198.0	-4.0
Student 11	213.0	216.0	3.0
Student 12	225.0	218.0	-7.0
Student 13	219.0	199.0	-20.0
Student 14	192.0	190.0	-2.0
Student 15	213.0	215.0	2.0
Student 16	202.0	196.0	-6.0
Student 17	192.0	199.0	7.0
Student 18	162.0	164.0	2.0
Student 19	208.0	207.0	-1.0
Student 20	208.0	210.0	2.0

When analyzing the data by grade, seventh-grade data show that 40% of the students experienced no summer reading loss or made gains, and 60% experienced reading loss according to MAP RIT scores. Growth scores ranged from 2-7 points, while the largest drop was 20 points. The median RIT score for the eight students who

experienced gain increased 2.0 points, while the remaining 12 lost a mean of 4.5 points.

Based on the MAP RIT scores of the 40 randomly selected participants, 43% made reading gains or experienced no summer reading loss, and 57% experienced summer reading loss. Based on the MAP RIT scores, there was an average of a 3.09 point growth for students who experienced summer reading gains. It is important to note the minimum and maximum differences in the analysis as they represent a wide range. The sixth-grade participants had a minimum loss of 1.0 points and a maximum gain of 21.0 points. The seventh-grade participants had a minimum loss of 2.0 points and a maximum gain of 7.0 points. These scores showed a similar variation in loss and a significant difference in gains among participants. This significant difference is based on the performance of one student with a 21-point increase on the MAP RIT score. With the exclusion of the one student, the scores would show a similar variation in loss and gain among participants. The total group of randomly selected participants had a minimum loss of 1.0 point and a maximum gain of 21 points. The largest decline by one student among the sample group was 20 points, and the largest gain by one student was 21 points.

A comparison of the STAR reading pre/postassessments was also used to analyze student performance and to determine if the literacy strategies introduced during the literacy block had a positive impact on reading.

Table 5 shows the individual STAR reading pre/postassessment scores for the 20 randomly selected sixth-grade participants. Table 5 captures the amount of loss and/or gain experienced by each individual sixth-grade student.

Table 5

Sixth Grade STAR Reading Pre/Postassessment Data

Participant	Pretest	Posttest	Loss/Gain
Student 1	635	492	-143
Student 2	86	83	-3
Student 3	508	361	-147
Student 4	888	759	-129
Student 5	507	528	21
Student 6	682	591	-91
Student 7	264	217	-47
Student 8	500	453	-47
Student 9	101	74	-27
Student 10	73	231	158
Student 11	468	300	-168
Student 12	850	438	-412
Student 13	518	193	-325
Student 14	583	459	-124
Student 15	512	8	-504
Student 16	1139	802	-337
Student 17	466	433	-33
Student 18	401	304	-97
Student 19	283	352	69
Student 20	384	366	-18

The results of the STAR reading assessment showed that three of the 20 sixth-grade participants, 15%, scored higher on the posttest than on the pretest, with an average increase of 83.0 points, while 17 sixth-grade participants, 85%, scored lower with an average decline of 156.0 points. Data indicate significant drops in posttest results among sixth-grade participants.

Based on the STAR reading assessment, results show that there was a negative difference between the pre and post scores. Overall, 14 of the 40 participants, 35%, scored higher on the posttest than on the pretest; and 26 of the 40 participants, 65%, scored lower. The mean scores show a decline of 63.13 points in student overall scores. It is important to note the variation between the minimum scores and maximum scores on

both the pre and postassessments. The minimum score on the pretest was a 73, while the minimum score on the posttest was an 8. The maximum score on the pretest was 1,139, while the maximum score on the posttest was 969. Seventh-grade participants showed greater increase on the STAR posttest when compared to sixth-grade participants. The significant change in scores between students who showed a decline in scores questions the validity of the assessment.

Table 6 shows the individual STAR reading pre and postassessment scores for the 20 randomly selected sixth-grade participants. The table captures the amount of loss and or gain experienced by each individual seventh-grade student.

Table 6

Seventh Grade STAR Reading Pre/Postassessment Data

Participant	Pretest	Posttest	Loss/Gain
Student 1	214	368	154
Student 2	500	556	56
Student 3	350	213	-137
Student 4	893	552	-341
Student 5	592	643	51
Student 6	425	463	38
Student 7	422	517	95
Student 8	465	314	-151
Student 9	108	77	-31
Student 10	284	327	43
Student 11	426	596	170
Student 12	969	951	-18
Student 13	284	470	186
Student 14	306	317	11
Student 15	800	481	-319
Student 16	543	729	186
Student 17	522	587	65
Student 18	91	8	-83
Student 19	440	368	-54
Student 20	397	373	-24

The results of the STAR reading assessment showed that 11 of the 20 seventh-

grade participants, 55%, scored higher on the posttest than on the pretest, with an average increase of 96 points, while nine participants, 45%, scored lower, with an average decline of 129 points.

Research Question 2

To what extent do the literacy strategies used during the summer school program impact reading achievement? What literacy strategies were used throughout the summer school program? Which literacy strategies had the greatest impact on student achievement? The teacher perception survey and curriculum trainer interviews were used to highlight the literacy strategies used to instruct students during the literacy block and the impact specific strategies had on reading achievement. The survey and open-ended questions allowed teachers and curriculum trainers to express their perceptions of what strategies had the greatest impact on reading achievement. Once the surveys were completed and the interview responses were transcribed, responses were coded for themes.

Qualitative Methodology

A content analysis was used to analyze the results of the teacher perception survey and curriculum trainer interview responses. English language arts teachers completed the teacher perception surveys at the completion of the summer school program. Curriculum trainer interviews were also conducted at the completion of the summer school program. The content analysis examined the patterns and common themes mentioned during the curriculum trainer interviews and the teacher perception survey responses. The teacher perception survey consisted of nine questions. The questions honed in on literacy strategies implemented during the summer school program. The

curriculum trainer interviews consisted of six questions. These questions addressed the training that was provided for the literacy curriculum and expectations for the literacy block.

The overall findings from the teacher perception survey indicate that the literacy strategies used during summer school were similar among the five teachers who completed the teacher perception survey. The five teachers who completed the survey are all certified in secondary English. The teacher perception survey was distributed in the form of a Likert scale ranging from 1-strongly disagree to 4-strongly agree. Table 7 represents the responses of teachers regarding their curriculum training.

Table 7

Teacher Perceptions of Curriculum Training, Questions 1, 2

Question	Response	Count	Percent
Staff received adequate training on literacy instruction and strategies.	Strongly Disagree	2	40%
	Disagree	0	0
	Agree	2	40%
	Strongly Agree	1	20%
The instructional strategies presented during the curriculum training were effective strategies to address students with reading deficits.	Strongly Disagree	2	40%
	Disagree	0	0
	Agree	2	40%
	Strongly Agree	1	20%

Of the five teachers, two agreed that staff received adequate training on literacy instruction and strategies, one strongly agreed, and two strongly disagreed.

This study examined the literacy strategies used within the summer school literacy block and the reading achievement made in summer school. The study aimed to provide insight on effective instructional practices and strategies used to improve reading in middle school grades. The teacher perception survey focused on six instructional

strategies used to teach literacy: guided reading, small group instruction, scaffolding instruction, cooperative learning, vocabulary development, and direct instruction. Table 8 represents the responses of teachers regarding the instructional strategies implemented during literacy instruction.

Table 8

Teacher Perception of the Instructional Strategies Implemented During Literacy Instruction, Questions 3, 4, 5, 6, 7, 8

Question: The following instructional practices and literacy strategies were implemented in the classroom.	Response	Count	Percent
Guided Reading	Strongly Disagree	0	0
	Disagree	0	0
	Agree	0	0
	Strongly Agree	5	100%
Small Group Instruction	Strongly Disagree	0	0
	Disagree	0	0
	Agree	2	40%
	Strongly Agree	3	60%
Scaffolding Instruction	Strongly Disagree	0	0
	Disagree	0	0
	Agree	2	40
	Strongly Agree	3	60%
Cooperative Learning	Strongly Disagree	0	0
	Disagree	0	0
	Agree	2	40%
	Strongly Agree	3	60%
Vocabulary Development	Strongly Disagree	0	0
	Disagree	1	20%
	Agree	2	40
	Strongly Agree	2	40%
Direct Instruction	Strongly Disagree	0	0
	Disagree	0	0
	Agree	2	40
	Strongly Agree	3	60%

Teachers reported using a combination of strategies to teach literacy. The most

common practices were guided reading, direct instruction, small group instruction, cooperative learning, and scaffolding instruction. One teacher indicated that they did not use vocabulary development as a component of their literacy instruction. Table 9 presents the overall perception of teachers regarding the impact of the strategies on reading achievement.

Table 9

Teacher Overall Perception that Literacy Strategies Used During Summer School had a Positive Impact on Reading Achievement, Question 9

Question	Response	Count	Percent
Literacy strategies positively impacted reading achievement.	Strongly Disagree	1	25%
	Disagree	0	0
	Agree	2	25%
	Strongly Agree	2	50%

Based on the results of the teacher perception survey, one teacher strongly disagreed that the literacy strategies used during summer school had a positive impact on reading achievement, two teachers agreed that the literacy strategies used during summer school had a positive impact on reading achievement, and two teachers strongly agreed.

The curriculum trainer interviews focused on the training that was provided to all of the summer school teachers. Questions asked during the curriculum trainer interviews were

- What are your area(s) of certification?
- What literacy curriculum was used for summer school? Does it align with the SOL?
- During the literacy component of the curriculum training, what instructional strategies were reviewed to assist with literacy instruction?

- What were the expectations for teachers delivering literacy instruction? What type of instruction would we see if we walked through the classroom?
- What literacy based instructional strategies did you see most often when you observed classroom instruction?

The overall findings from the curriculum trainer interviews indicate minimal literacy training for the summer school program and that the individuals providing training on the curriculum and instructional strategies were not certified teachers. The individuals worked with the division partners, the YMCA, as site directors.

The summer school curriculum used for middle school literacy was On the Record. This curriculum was through the BELL Foundation, Scholastic partners. When asked about the alignment of the curriculum, Curriculum Trainer 2 expressed many teachers were “confused that the curriculum did not fully align with the Standards of Learning.” However, since the curriculum trainers were not licensed teachers, there was minimal knowledge of the alignment of the curriculum to the SOL.

The summer school training focused on culture, behavior management, trauma informed care, enrichment, curriculum overview, and expectations for lesson planning. According to both trainers, there was miscommunication and confusion regarding who would provide the curriculum training. The YMCA partners had the expertise in the other areas provided during the summer school training, while it was assumed that the division staff would be the experts in the curriculum and would help with that area of training. Therefore, Curriculum Trainer 1 reported there was no focus on the summer school curriculum and effective instructional strategies during the summer school training.

Both practices were not broadly addressed, most teachers implemented instructional practices that targeted increasing literacy skills. This was evidenced by classroom visits and walkthrough observations. Curriculum Trainer 2 observed whole group and small group reading, read aloud, and cooperative learning. It was indicated that during the classroom visits, she noticed a significant language barrier with students and accessing literacy materials. “Teachers tried their best, but due to the significant language barriers they did not have much time to dig into the curriculum.” “It would have made a huge difference if we would have had material in Spanish.” As a result, many students were unable to engage in the text.

Both curriculum trainers expressed lack of focus on expectations related to the delivery of literacy instruction. Teachers were observed engaging in strong instructional practices. However, there was minimal monitoring and feedback provided during the program. There was also a lack of understanding of the structure as it related to the literacy block.

Curriculum Trainer 2 stated,

Teachers were to follow the lesson plans provided within the curriculum. That was one thing we loved about the program, is that the lesson plans were provided for each day. However, teachers did not realize they should have their own separate lesson plans and maintaining the lesson plan book for their students.

According to Curriculum Trainer 1, training was open and recommended to division representatives and YMCA partner representatives. This training provided a deep dive into the curriculum used during the summer school program. Curriculum Trainer 1 reported that “it would have been beneficial to have someone from the school

division participate in the curriculum training overview. This would have allowed everyone to hear the same thing. No one from the school division participated.”

According to Curriculum Trainer 1, the site-based training only provided an introduction of the curriculum, not an emphasis on literacy instructional practices.

Both curriculum trainers agreed that there was not enough guidance on the curriculum and more time should have been devoted to curriculum and instructional strategies aimed to increase literacy. Curriculum Trainer 1 stated, “Instructional coaches did not participate in online training. Although, the teachers were using the curriculum, it was not being used the way the curriculum was meant to be used.”

Summary

The data analysis did not support the anticipated outcomes. It was anticipated that students participating in the summer school program would experience no summer reading loss. On the contrary, according to the descriptive statistics, there was a mean decrease in reading levels for both MAP (beginning-of-year/end-of-year) scores and STAR pre/postassessment scores for both sixth- and seventh-grade groups. Based on the MAP RIT scores, 43% of the participants made reading gains or experienced no summer reading loss, and 57% experienced summer reading loss. In addition, it was anticipated that if teachers implemented effective literacy strategies during the literacy block, students would experience growth in the STAR pre and postassessments. Based on the STAR reading assessment, 14 of the 40 participants, 35%, scored higher on the posttest than on the pretest; and 26 of the 40 participants, 65%, scored lower.

The data analysis from the STAR pre/posttest, teacher perception survey, and curriculum interviews also did not support the anticipated outcomes. It was anticipated

that the curriculum training and implementation of effective literacy strategies would result in positive outcomes with student achievement as evidenced by growth as measured by the STAR pre/postassessments. STAR pre/posttest assessments showed a significant drop in scores which indicate minimal reading achievement as a result of the literacy strategies implemented during summer school. The data collected from the teacher perception surveys showed that different literacy strategies and instructional practices were implemented in the classroom, but the depth of the strategies and practices are uncertain. The data collected from the curriculum trainer interviews showed that implementation of strategies were observed. However, there was no targeted training provided on the summer school curriculum, appropriate literacy strategies, and instructional practices to teach reading. The data collected from the MAP assessment, STAR pre/postassessment, teacher perception survey, and curriculum trainer interview showed a positive impact on some individual students who participated in the summer school program. However, over half of the participants experienced a decline in their reading. There are many possible reasons for this, and they will be discussed in more detail in the next chapter.

Chapter 5: Discussion

Introduction

Summer learning loss is one of the most significant causes of the achievement gap between lower and higher income students. On average, summer time away from school creates an annual achievement gap of approximately three months between rich and poor students, favoring the students from the more economically advantaged families (Allington & McGill-Franzen, 2003a). Proponents of the faucet theory attribute this gap to lack of access to resources during the summer months. During the school year, resources offered through the schools are provided to all students equally. However, during the summer months, the faucet is turned off for low-income students and the resources become unavailable. For higher income families, resources continue to be available in the form of enrichment, vacations, exposure to literacy, and other continued learning experiences (Entwisle, Alexander, & Olson, 1997).

SRPs have been used to combat summer reading loss and influence reading during the summer (Petty et al., 2017). Summer school is a form of SRP used to prevent summer reading loss. Summer school programs have a punitive perception and are historically only available to students based on low achievement (Kim & White, 2011). However, when done well, summer school could lessen the achievement gap by reducing summer reading loss.

This program evaluation evaluated a revitalized summer school program that provided remedial instruction focusing on skills students failed to master during the school year. The purpose of this study was to examine the impact the summer school program had on reducing summer reading loss among high-poverty students as measured

by the reading portion of the MAP assessment. The study also evaluated the impact of literacy strategies on reading achievement as measured by the teacher perception survey, curriculum trainer interview, and the pre/post standardized test for the assessment of reading (STAR) assessment. The study used the following indicators as criteria for students invited to participate in the program: SOL scores, grades, attendance, and teacher recommendation. Eligible participants were one or more grade levels below in reading according to winter (end-of-the-year) MAP scores.

Qualitative and quantitative methodologies were used during the study. The MAP end-of-year and beginning-of-year assessments were conducted to assist with the criteria for admittance into the summer school program and to measure summer reading loss upon completion of the program. At the beginning of the summer school program, students were administered the STAR reading preassessment. This information was used to determine the performance level of students entering into the summer school program. The STAR reading postassessment was administered at the close of the summer school program to measure the overall impact the summer school program had on reading achievement.

Middle school English language arts teachers were administered the teacher perception survey to measure their implementation of effective literacy strategies during the literacy block. The literacy strategies outlined in the teacher perception survey include guided reading, small group instruction, scaffolded instruction, cooperative learning, vocabulary development, and direct instruction. Teachers were asked to rate their perception of the effectiveness of the summer school program on student reading achievement. Curriculum trainer interviews gauged the overall effectiveness of the

curriculum training provided for all teachers.

The data collected from the MAP assessments, star pre and postassessments, teacher perception surveys, and curriculum trainer interviews were used to help answer the research questions.

Research Question 1: What is the impact of the summer learning program on the reading achievement level of high poverty students? Summer school is an SRP that, when done correctly, could have a significant effect on reading performance. For this study, RIT scores from the MAP reading assessment were used to measure the effect of summer school on reading achievement. A beginning of the year MAP RIT score of 216 indicates on grade level reading for sixth grade and a beginning of the year MAP RIT score of 218 indicates on grade level reading for seventh grade. In reviewing the spring (end of the year) scores, on average, both sixth- and seventh-grade participants of the summer school program entered summer school reading approximately two years or more below grade level. When the spring end-of-year MAP RIT scores were compared to the fall beginning-of-year MAP RIT scores, they revealed that on average, 60% of the students participating in the summer school program experienced summer reading loss. whereas, 40% of the students participating in the summer program experienced no summer reading loss, with some students experiencing growth. When analyzing the outcomes by grade level, there was no significant difference between sixth-grade and seventh-grade participants. Overall, the summer school program had a positive impact on some of the participating students. Although more students experienced summer learning loss than not, there was a positive influence on a portion of the participants. These results do not take into account the attendance of the students of the sample group.

Previous research suggests that most school divisions provide a summer school program to support students requiring remedial support. However, most students do not attend during the summer months (Borman, 2001). Schacter (2003) advised that summer school is an ineffective reading intervention for high-poverty students due to attendance and the duration of the summer school program. However, a positive summer school experience can minimize reading loss. Also, when implemented well, it can have lasting effects. Literature reveals that remedial summer school is beneficial to all students. However, there is a more significant impact on students in earlier grades. Providing enrichment-focused summer school can be a great motivator for students attending summer school (Almus & Dogan, 2016).

The summer school program within this study provided several enrichment opportunities and had the structural components of a successful summer program. These structural components included instruction, a solid schedule, incentives, and extracurricular activities. Alexander et al. (2001) suggested that summer school programs should have clear standards for quality. They should respond to individual needs through innovative and creative teaching strategies. Overall, there were students who experienced reading growth and/or refrained from summer reading loss as a result of their summer school participation. The school division implemented several characteristics outlined in research as components for successful summer programming.

Research Question 2: To what extent do the literacy strategies used during the summer school program impact reading achievement? What literacy strategies were used throughout the summer school program? Which literacy strategies had the greatest impact on student achievement? The teacher perception survey and

curriculum trainer interviews were used to highlight the literacy strategies utilized to instruct students during the summer school literacy block and the impact specific strategies had on reading achievement. Based on the results of the teacher perception survey, a variety of literacy strategies were incorporated into instruction during the literacy block of summer school. There were six literacy strategies outlined in the teacher perception survey: guided reading, small group instruction, scaffolded instruction, cooperative learning, vocabulary development, and direct instruction. Findings indicate that all of the surveyed teachers incorporated guided reading, scaffolded instruction, and direct instruction into their literacy block. In addition, at least four of the five teachers incorporated small group instruction, vocabulary development, and cooperative learning. The teacher perception survey suggested that these strategies were strategies presented during the curriculum training in addition to strategies that teachers had in their toolbox to assist in reading.

Guided reading is a literacy strategy that allows teachers an opportunity to engage in small homogenous groups where teachers examine data to make determinations about student needs and the literacy skills in which students need most support. The use of guided reading exposes students to texts they may not normally engage in and leads to meaningful discussions that increase reading comprehension. Based on the teacher perception survey, all teachers utilized guided reading during their literacy block.

Scaffolded instruction is a process in which the teacher provides temporary student supports to enhance learning and increase mastery of skills. As students master the skills, the scaffold support is gradually released. It is beneficial when teaching a new

skill and a student is experiencing difficulty. Teachers implied use of scaffolding throughout the literacy block.

Direct instruction is a highly controlled instructional approach intended to accelerate the learning of at-risk students. One of the main features of direct instruction is the scripted lesson plan. The scripted lessons are presented in a sequential manner and hone in on specific foundational skills that build upon one another with the hopes of moving students to mastery at a faster pace. Although teacher perception surveys indicate that all participating teachers used direct instruction as a strategy to teach reading, curriculum trainers did not indicate any observance of this strategy. However, the curriculum trainers interviewed were not licensed educators and may not have had any background knowledge or experience with direct instruction.

Small group instruction typically follows whole group instruction to reteach or reinforce previously taught skills. Small groups can be heterogeneous or homogeneous depending on the needs of the group and the goal for the teacher. Teachers indicated use of small group instruction throughout the literacy block. The curriculum trainers acknowledged observance of small group instruction on a continual basis during the summer school program

Vocabulary development is a crucial foundation for literacy and is a predictor of learning outcomes for all students, especially ELLs (Ajayi & Collins-Parks, 2016). There is a strong correlation between vocabulary development and reading comprehension. Vocabulary knowledge serves as a predictor of the achievement gaps. It is critical to implement vocabulary development into the summer school literacy block since high-poverty students have a limited reading vocabulary. According to the teacher perception

survey, four of the five teachers implemented this strategy.

Cooperative learning is an important instructional strategy that includes students of varying ability levels engaging in learning activities to their understanding of the subject matter. Each member of the cooperative learning team is responsible for their learning and the learning of their teammates. Cooperative learning increases student confidence, improves student achievement, and increases student motivation (Balkcom, 1992). All the teachers indicated implementation of this strategy. Curriculum trainer interviews also indicated the observance of this strategy on a consistent basis.

The curriculum trainer interviews highlight a few of the literacy strategies implemented by the literacy teachers as evidenced by classroom visits and walk-through observations. Curriculum trainers revealed that teachers were observed utilizing small group instruction, read aloud, and cooperative learning on a consistent basis. Curriculum trainers were not aware what data the teachers used to determine the small group instruction. However, it was noted that small group instruction was an ongoing strategy used during the literacy block. In addition, curriculum trainer interviews revealed the ongoing observance of cooperative learning. Students were witnessed working in collaborative partnerships and groups during the literacy block. Another strategy that was noticed, although not noted as a literacy strategy on the teacher perception survey, was the read aloud strategy. Teachers were observed using the read aloud strategy consistently during the literacy block.

The STAR reading pre and postassessments were used to determine the effectiveness of the literacy strategies incorporated during the summer school literacy block. It was anticipated that there would be an increase in the pre and post STAR scale

scores. This increase would be a direct result of the instructional strategies incorporated into the literacy instruction. Based on the curriculum trainer interviews, there was minimal focus on curriculum and literacy strategies during the curriculum training. However, it was reported that teachers implemented meaningful literacy strategies despite the omitted training. Overall, according to the teacher perception survey results, it was perceived that the literacy strategies used during the summer school program had a positive impact on reading achievement. The findings revealed that although teachers believed that the literacy strategies used during the summer program positively impacted student reading performance, the lack of targeted curriculum-based training limited the potential growth and therefore resulted in minimal influence on reading achievement. Overall, 35% of the participating students experienced growth as a result of the literacy instruction, and 65% experienced no growth or a decline in their reading performance.

Implications of Findings

This study showed that after analyzing the MAP RIT scores and the STAR scale scores, the sample group showed a mean decrease in reading achievement after participating in the 5-week summer school program. There were statistically significant differences in pre and post scores for both MAP and STAR pre and postassessments among both sixth- and seventh-grade groups. The postassessments have lower mean values than the preassessments. When analyzing the individual student performance, 43% of the students made reading gains, and 57% experienced summer reading loss as measured by the MAP RIT scores. In addition, when analyzing individual STAR assessment scores, 35% of the students showed progress, while 65% declined.

Additionally, findings from the curriculum trainer interviews indicate that

teachers were not provided with adequate training on curriculum and best practices. Teachers indicated they used familiar instructional strategies when educating students during the summer school program.

The review of literature provided an overview of the different structures and components of effective summer school programs. The literature proposed that when done correctly, summer school could effectively lessen the achievement gap and reduce summer reading loss. One significant recommendation mentioned in the literature encouraged teachers to use instructional strategies different from the ones they used during the school year. According to the curriculum trainer interviews, teachers did not receive any targeted curriculum training or best practices training that would provide them with additional strategies to use during summer school literacy block. On the contrary, according to the teacher perception survey, 60% of the teachers who completed the survey indicated they received adequate training. This information should be considered when making decisions or modifications to the summer school program.

Implications for Practice

School divisions continue to aim toward successful implementation of summer school programming for students performing below academic benchmarks during the school year while combating the stigma and perception that categorizes all participants as failures by being mandatory for those not meeting promotion standards. It is advisable for district administrators to revisit the summer school brand. Within this district, several students met the criteria for summer school, were invited to attend, and chose not to participate. The lack of participation could be a direct result of the stigma connected to summer school involvement. To increase student participation, the district should

consider ways to counter the stigma by revamping the communication and language to families as they relate to summer school attendance. Alexander et al. (2001) recommended putting a positive spin on summer school programs. Summer school should be viewed as a learning opportunity versus punishment. Therefore, the focus should be on helping students grow instead of focusing solely on ways to force months of failed learning onto students. One recommendation by Gatens (2020) is to extend the applicant pool. This suggests that school divisions invite struggling students and students who have demonstrated academic success. This would create a more conducive learning environment.

Students were invited to participate in the summer school program based on the following indicators: SOL scores, grades, attendance, and teacher recommendation. Participants eligible for the summer learning program were one or more grade levels below in reading and/or math according to winter MAP scores. Since summer school was slated for students meeting the set criteria, it is important to ensure those students have admittance preference. Students were required to register for enrollment into the summer school program over a 2-week time period. Once the application window was closed, enrollment was open to any other student in the division who wanted to attend. Instead of opening enrollment to all students, it is advisable that the school division have a tiered list of participants to invite. In order to ensure the division continues to target students with deficits in reading, it is advisable that there be a list of invitees who meet all of the indicators for immediate admittance and a list of alternate students who meet a range or percentage of the indicators, and so forth. This would ensure that students requiring the intervention support receive it.

Borman (2000) encouraged school divisions to begin looking at summer school for students before they have fallen behind. He implied that summer school should be preventative instead of solely remedial; that it should start in early grade levels and be over multiple summers. Since the research suggests starting at an early age, it would be meaningful to track elementary level summer school participants from this school year by inviting them to attend the summer school program for multiple years and measuring the effectiveness of the summer school program based on their overall performance. This would require the summer school program to be more challenging and not focus solely on standards and skills not mastered during the school year but skills required for continued success as they progress in grade levels.

These findings suggest that summer school can promote reading achievement and assist in closing the reading gap between low- and high-income families when implemented effectively. There are several factors that could have impacted the influence of the summer school program. Summer school should hone in on ensuring mastery of reading concepts. In order to produce positive results, summer school should be taught by quality teachers. Hiring summer school literacy teachers with high levels of performance as evidenced by passing rates on state- and division-wide assessments would provide a higher success rate on student performance over the summer. Literature encourages divisions to assign higher level teachers to summer school programs to support struggling readers. Students who require assistance meeting grade level proficiency need teachers with tracked success. In addition to hiring highly qualified teachers, it is critical to provide quality training and staff development. When planning for summer school programming, great emphasis on the teacher pool and curriculum

training will be imperative. There should also be ongoing monitoring of teacher performance during the summer school program, with evaluative measures based on assessment results.

Literature suggests that the curriculum be aligned to the state standards. In addition, there is great emphasis on the structure of the summer school program and how that attributes to the overall impact of the program. Almus and Dogan (2016) emphasized the focus on the summer school schedule, incentives offered during the program, and instructional strategies implemented during literacy instruction. There should be a focus on project-based learning, cooperative learning, educational games, and student-led instruction.

Summer school programs should evaluate the literacy strategies implemented by teachers. The teacher perception survey and curriculum trainer interview identified the strategies that were used. However, literature recommended strategies be evaluated for effectiveness (Christie, 2003). This additional component could offer a more concrete implication of strategies deemed as an effective measure to combat summer reading loss. Scaffolding instruction is deemed as one of the most beneficial strategies for literacy instruction. Moreover, the summer school curriculum should be engaging, and teachers should maximize their use of effective instructional strategies to ensure academic success. Almus and Dogan (2016) recommended aligning the summer school curriculum with the curriculum used during the academic school year and that compliments the state standards.

In addition to evaluating strategies for effectiveness, it would be valuable to evaluate effective reading interventions that could be embedded into the summer school

program. This study examined the following instructional strategies and scaffolding supports that can be used across content: guided reading, small group instruction, scaffolded instruction, cooperative learning, vocabulary development, and direct instruction. However, employing reading interventions that directly address comprehension, decoding, fluency, and vocabulary may provide a better outcome than the practice of teaching basic reading skills in isolation. “Effective intervention needs to expose adolescents to texts and reading tasks that are complex and open-ended enough to support sophisticated reading” (Kim et al., 2016, p. 358). Most interventions for low performing readers use simplified texts.

Finally, summer school historically has minimal parental involvement. Parent involvement is a critical characteristic to ensure an effective summer school program. Programs with high parent involvement usually result in greater impact on students. In addition to parent involvement, developing partnerships with community stakeholders could also lead to a more effective summer school program (Terzian et al., 2009). Moving forward, school divisions may want to consider requiring parent involvement for students participating in summer school. This could include engaging in a parent night, parent conferences, and volunteer opportunities. When measuring the effectiveness of the summer school program, collecting input from parents via a parent survey or questionnaire would consider the parent’s perspective on the effectiveness of the program.

Recommendations for Further Study

The results of this program evaluation suggest the need for further studies. While some literature exists recognizing the characteristics of effective summer learning programs, further studies to specifically examine the characteristics of effective summer school programs and the literacy strategies and instructional practices that have the greatest impact on student achievement would be imperative to the overall success of summer school programming. Moreover, further studies to include the continued tracking of students who participated in the summer school program during the academic school year could reveal a more in-depth implication of the effectiveness of the summer school program. Currently, research halts once performance data are collected and used to determine whether students experienced summer reading loss or experienced reading gains over the course of one summer. Further studies to track the ongoing progress of summer school participants over the following school year would determine if there was a continued progression of reading achievement which could ultimately lead to closing the achievement gap.

In addition, further studies need to compare teacher attitude with student outcomes. Measuring the attitude of summer school teachers and their perceptions on the impact of summer school and its ability to close the reading achievement gap would provide insight on how attitude impacts instruction and influences outcomes. Literature suggests that having the right teacher for summer school is imperative for the success of the program. Therefore, examining teacher attitude towards summer school could grant school divisions insight when hiring teachers for summer school programs.

Moreover, since chronic absenteeism was an indicator used to determine which

students were to be invited into the summer school program, it would be beneficial to examine the findings of the MAP assessment scores and the STAR assessment scores to see how attendance may have impacted student performance. Moving forward, the study should hone in on students who attended the summer school program at least 85% of the time and then determine the impact of the summer school program on those students. A comparison of students who participated in the summer school program at least 85% of the time to those who attended less than 85% of the time would be an important measure to determine how attendance impacts overall performance.

The benefits of summer reading programs transcend beyond high poverty students. Further studies could look at the benefits of participation for all students. If students participate in summer reading programs based on a variety of criteria, studies can be done to determine the impact on each subgroup of students.

Limitations of the Study

There were a number of limitations presented in this study. One significant limitation was the lack of curriculum training provided to the summer school teachers. Since minimal curriculum training was provided, the researcher was unable to adequately gauge the full impact of the summer school program. The curriculum training was projected to provide an in-depth review of the summer school curriculum and present instructional strategies and literacy practices that would help teachers address reading deficits that could ultimately eliminate summer reading loss. Without the proper training, these areas were not addressed, and teachers were left to utilize the same literacy strategies and instructional practices they used throughout the school year. Christie (2003) emphasized that an engaging curriculum is a critical component to summer school

programs and that students participating in summer school would not benefit from a repeat of the same instruction that is offered during the academic year. Although an alternative curriculum was used for summer school than during the school year, the lack of training on the curriculum may have hindered appropriate implementation.

Another limitation of the study was not having a control group. Without the use of a control group, the researcher was unable to compare performance of students who met the summer school criteria, were invited to the summer school program, but chose not to attend to the students who met the summer school criteria, were invited to the summer school program, and attended. Having this comparison data would have provided greater indication of the overall effectiveness of the summer school program. Despite the fact that on average, there was a decrease in performance among participants, the researcher could have determined if participating students experienced less of a decrease in performance than those students who were invited but did not attend.

Another limitation was the low number of teachers who participated in the study by completing the teacher perception survey. The researcher initially planned to provide an overview of the program evaluation to the summer school staff along with the purpose of the research and how the information could be used to improve future summer school programming. However, since the researcher was unable to provide a face-to-face overview of the study to the teachers and summer school staff, it created a barrier. Therefore, participation in the study was based on a letter providing an overview of the research and inviting teachers to participate. It is the assumption that since this method was very impersonal, it ultimately impacted the overall participation.

This study relied on student test scores to help answer both research questions.

The findings from the assessments would assume that students gave their best efforts. When examining the STAR pre and postassessment and analyzing the maximum and minimum scores, it does appear that students did not put forth effort in the assessments and may not have taken the assessments seriously. The significant decrease in the STAR postassessment scores when compared to the STAR preassessment scores suggests that this measure does not accurately reflect student overall reading achievement.

Finally, another limitation in the study was omitting a question referencing the amount of reading training in the teacher perception survey. The summer school committee, the group of individuals who validated the survey, indicated that the question, although a good question, was not necessary for this particular study. However, Christie (2003) expressed that students requiring additional support to meet grade level proficiency need teachers with tracked success and specialized reading training. Having this question on the teacher perception survey could have potentially given the researcher an opportunity to measure how the amount of teacher training in reading contributed to reading achievement.

Delimitations of the Study

The study includes a sample of students who participated in the summer school program. Due to the shift in enrollment conditions, summer school participants were no longer required to meet the indicator criteria. Therefore, there is no guarantee that the students selected in the sample group meet the initial indicator measures that were developed to help identify the appropriate summer school candidates.

Conclusion

The purpose of this program evaluation was to determine the impact of the

summer school program on summer reading loss and overall reading achievement for participating students. The goal of the summer school program was to combat summer reading loss by addressing skills not mastered during the academic school year. After attending the summer school program, there was a decrease in performance as measured by the mean scores of the MAP reading assessment and the STAR reading assessment. On the other hand, there were individual students who experienced reading gains as evidenced by the assessment data.

To determine the impact of the summer school program on summer reading loss, spring (end-of-year) MAP RIT scores were compared to fall (beginning-of-year) MAP RIT scores. Overall, participating students continued to experience summer reading loss even after participating in the summer school program.

In addition, the researcher aimed to determine if utilizing effective literacy instructional strategies during the literacy block of the summer school program influenced the overall success of students participating in the program. To determine the effectiveness of the literacy strategies on reading achievement, teacher perception surveys and curriculum trainer interview responses were examined. These data implied, to some extent, literacy strategies were embedded within literacy block. However, there was no direct correlation of the instructional strategies positively impacting student overall reading achievement.

Summer reading loss is not a new phenomenon. On the contrary, it has been of great concern throughout public education for decades. As a result, evidence-based SRPs have been implemented throughout the school communities to address the growing concern. Summer school programs, when done effectively, can positively counter

summer reading loss and promote gains. In this program evaluation, several challenges posed as factors that negatively impacted overall student achievement. When planning for future summer school programming, it will be critical for the school division to consider some of the limitations and recommendations mentioned to ensure a successful program.

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Appendix A
Teacher Perception Survey

Literacy Teacher

Perception Survey

Summer School Site: _____

Years of Full-Time Teaching Experience: (Please Circle Answer)

0-3

3-5

5-10

10-15

15+

Area(s) of Certification: _____

To what extent do you agree or disagree with the following statements? Circle one answer per question.

Teacher Perception on Literacy Strategies	Strongly Disagree	Disagree	Agree	Strongly Agree	
Staff received adequate training on summer school curriculum and literacy strategies.	1	2	3	4	
The instructional strategies presented during the curriculum training were effective strategies to address students with reading deficits.	1	2	3	4	
The following instructional practices and literacy strategies were implemented in the classroom:					
Guided Reading	1	2	3	4	
Small Group Instruction	1	2	3	4	
Scaffolding Instruction	1	2	3	4	
Cooperative Learning	1	2	3	4	
Vocabulary Development	1	2	3	4	
Direct Instruction	1	2	3	4	
It is my perception that the literacy strategies used during summer school had a positive impact on reading achievement.	1	2	3	4	

If you did not use any of the literacy strategies presented during the summer curriculum training within your literacy block, please list what strategies you did use.

Appendix B

Curriculum Trainer Interview Questions

Curriculum Trainer Interview Questions

Summer School Site: _____

1. What are your Area(s) of Certification?
2. What Literacy Curriculum is being used for Summer School? Does it align with the Standards of Learning (SOL)?
3. During the literacy component of the curriculum training, what instructional strategies were reviewed to assist with literacy instruction?
4. What are the expectations for teachers delivering literacy instruction? What type of instruction should we see if we walked through the classrooms?
5. What literacy based instructional strategies do you see most often when you observe classroom instruction?

Follow-Up Questions

- What would you recommend for summer school next year regarding curriculum training?